



University of Connecticut
OpenCommons@UConn

Doctoral Dissertations

University of Connecticut Graduate School

5-11-2013

Making Sense, Making Do: Local District Implementation of a New State Induction Policy

Chad D. Ellis

University of Connecticut - Storrs, chad_d_ellis@yahoo.com

Follow this and additional works at: <https://opencommons.uconn.edu/dissertations>

Recommended Citation

Ellis, Chad D., "Making Sense, Making Do: Local District Implementation of a New State Induction Policy" (2013). *Doctoral Dissertations*. 95.

<https://opencommons.uconn.edu/dissertations/95>

Making Sense, Making Do: Local District Implementation of a New State Induction Policy

Chad D. Ellis, Ph.D.

University of Connecticut—2013

This dissertation is comprised of three separate yet related papers focused on Connecticut's new beginning teacher induction program: the Teacher Education and Mentoring (TEAM) program. The study uses data collected from in-depth, semi-structured interviews with twenty two participants including program leaders at the Connecticut State Department of Education as well as district-level personnel, beginning teachers and their mentors, in three school districts in Connecticut. The first paper examined the implementation efforts of three districts and identified factors influencing their implementation. It found that local districts' understanding of procedural requirements were closely aligned with state-level intentions but that substantive understandings were incomplete, particularly as they applied to the connection between new teacher learning and student achievement. The second paper examined the role of TEAM and the mentoring relationship and the degree to which new teachers and their mentors believed their participation in TEAM contributed to their professional learning. The study found that both teachers and mentors believed their experience with TEAM led to new professional learning, but their ability to communicate the relationship between their experiences and student learning outcomes were less explicit. The third paper analyzed the TEAM program using the High Leverage Policy (HLP) framework developed by the Center for Education Policy Analysis at the University of Connecticut's Neag School of Education. The study found that the TEAM

program contains major elements of the HLP framework but that additional time and research is necessary for a full evaluation of its influence on professional learning and student achievement.

Making Sense, Making Do: Local District Implementation of a New State Induction Policy

By

Chad D. Ellis

B.S., University of Connecticut, 1998

M.A., University of Connecticut, 1999

6th year, University of Connecticut, 2005

A Dissertation Submitted in Partial Fulfillment

Of the Requirements for the Degree of

Doctor of Philosophy

at the

University of Connecticut

May, 2013

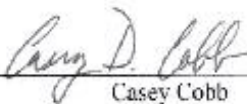
APPROVAL PAGE

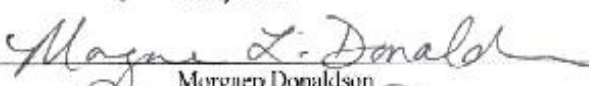
Doctor of Philosophy Dissertation

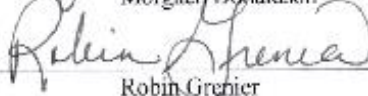
Making Sense, Making Do: Local District Implementation of a New State Induction
Policy

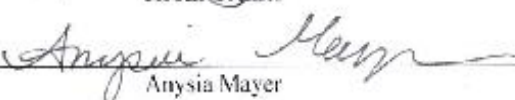
Presented by

Chad D. Ellis, B.S., M.A., 6th Year

Major Advisor 
Casey Cobb

Associate Advisor 
Morguen Donaldson

Associate Advisor 
Robin Grenier

Associate Advisor 
Anyisia Mayer

University of Connecticut

2013

Acknowledgements

I would be remiss if I did not recognize and thank the people who helped and supported me throughout this journey. To start, I would like to thank a group of professors who, although not still at UCONN, helped to shape my learning and understanding of educational policy: Eric Haas (my first advisor), Courtney Bell, and Glen Wilson. Each of you taught me a great deal and helped me to see the world of education in new ways.

I owe my greatest debt of gratitude to my dissertation committee: Casey Cobb, my major advisor, Morgaen Donaldson, Robin Grenier, and Anysia Mayer. Thank you for your patience as I fumbled my way through, asking countless inane questions and, at times, whining like a mule. Each of you has helped me in countless ways, both professionally and personally. I also thank you for being great role models as scholars and as human beings. I am in awe of each of you and hope to do you proud.

Finally, I would like to thank my family and friends for your support and encouragement. Even though you thought I was crazy for doing this in the first place, you have been there when I needed you. You taught me my first lessons about the inequities of this world and about the potential for education to change a person's life. The lessons you taught have motivated me to pursue teaching and research as my life's work. I will never give up the belief that education is the key to changing our personal and collective condition and that we must continue to work to achieve equity and opportunity for all people.

Table of Contents

Paper One: Making Sense, Making Do: Local District Implementation of a New State Induction Policy

Title page	1
Abstract	2
Introduction	3
From BEST to TEAM: Connecticut's teacher induction policy	5
Conceptual Framework	6
Policy implementation: sense making and transformation of intentions	6
Research Questions	9
Methods	9
Participant selection and data collection	9
Data analysis	13
Ensuring integrity of data and analysis	13
Subjectivity	14
Findings	15
District implementation of TEAM	16
Alignment of state-level policy intentions and local understandings	18
State level intentions for the program and assessment of district progress	19
Theme 1: Improved Student Achievement	22
Theme 2: Teacher Professional Learning and Reflection	23
Theme 3: Centrality of Mentorships	25
Theme 4: Decentralization of Authority	26
Summary	27
Making sense: local implementers' sense-making and understanding of policy intentions	28
Local-level understandings of TEAM's role in promoting improved student achievement	28
Local-level understandings of intentions for teacher professional learning and reflection	30
Local-level understandings of the centrality of mentorships	31
Local-level understandings of the decentralization of authority for program implementation	34
A sinking suspicion: Teacher misunderstanding and perceptions about the role of TEAM as an accountability tool	35

Making do: factors affecting local implementers' efforts with TEAM	37
Message pathways—dissemination of information from the state	37
In-district structures and supports	41
Mentor availability	42
Previous experience of local implementers related to induction programs	44
Affective dispositions among beginning teachers participating in TEAM	46
Discussion and Implications	49
Structural factors influencing implementation	49
Cognitive and affective factors influencing TEAM: the role of sense-making	51
Implications for policy implementation	52
Contributions to the field	54
Limitations of the study	55
Suggestions for further research	56
Appendix A. Study Participants	58
References	59
 Paper Two: Learning is a TEAM Effort: The Role of Connecticut's New State Induction Policy in the Professional Learning of Beginning Teachers	
Title page	69
Abstract	70
Introduction	71
Features of the TEAM program	73
Conceptual Framework	74
Induction policy and the influence of induction programs on teachers and students	74
Mentorships	77
Teacher Learning and Professional Development	81
Research Questions	84
Methods	85
Participant selection and data collection	85
Data analysis	87
Table 1. Study Participants	88
Ensuring integrity of data and analysis	88

Subjectivity	89
Findings	90
Teacher perceptions of their professional learning under TEAM	91
Teacher perceptions of the lasting effects of their learning on their instructional practice	95
Factors influencing the professional learning of new teachers under TEAM	98
Safety of risk	98
Mentor pairings	100
Individual motivation and attitude	101
Extending the conversation, participant suggestions about how to increase the benefits of TEAM	103
Discussion	104
Limitations of the study	106
Recommendations for practice	107
References	109
 Paper Three: Working the Angles: An Initial Appraisal of Connecticut's Teacher Education and Mentoring Program as High Leverage Policy	
Title page	115
Abstract	116
Introduction	117
A brief account of induction policy in Connecticut	119
Setting the Stage: Context for the TEAM Program	120
Teacher Quality	120
Teacher induction, mentorships, and professional learning	123
History of induction policy in Connecticut: Shifting models and priorities	125
High Leverage Policy Framework	129
Figure 1. High Leverage Policy Framework	130
Methods	132
Participant selection and data collection	132
Data analysis	135
Table 1. Study Participants	136
Ensuring integrity of data and analysis	137
Subjectivity	138

Findings	138
The Theory of Action behind TEAM	139
The Leverage Points	140
The Design Features: Policy instruments	141
Program goals and policy coherence	142
Planning for implementation: Addressing potential obstacles to success	144
Selling the program: Communication of policy intent	147
Examining outcomes: Participant impressions of the program's success	148
Student Outcomes	149
Figure 2. HLP Framework Applied to TEAM	152
Conclusion	153
Limitations of the study	154
Contributions to the literature	155
References	156

Making Sense, Making Do: Local District Implementation of a
New State Induction Policy

By

Chad D. Ellis

A Dissertation Article Submitted in Partial Fulfillment
Of the Requirements for the Degree of
Doctor of Philosophy
at the
University of Connecticut

First of three

July, 2012

ABSTRACT

Connecticut's Teacher Educator and Mentoring (TEAM) program is in its early stages of implementation. This study examined how local school districts implemented a new state teacher induction program and identified factors that affected implementation. It employed a general interpretivist methodology and was based on interviews with twenty-two participants at the state, district, and local school levels. The intentions of the program designers at the state level were compared to district and school level understanding of the program's intentions. Additionally, factors affecting local understanding and implementation of the new program were described. The findings of this study suggest that there was close alignment of understanding between the state and local implementers on the key provisions of the program related to its role as a professional development tool. The data reveal tacit rather than explicit understanding at the local level of the program's intention to improve student achievement. Variations in understanding can be attributed to other factors including contextual, structural, cognitive, and affective elements.

INTRODUCTION

Policy makers and those tasked with implementing policy are beset by numerous problems. Policy makers face the dilemma of crafting policy, developing instruments, and communicating their expectations to implementers in ways that will result in policy being carried out as intended (Hall & McGinty, 1997; Placier, Hall, McKendall, & Cockrell, 2000).

Implementers face the problem of enacting policy within their local contexts, often without clear direction from policy makers or without the resources necessary to carry out policy as intended (Berman, 1978; Lipsky, 1980; Placier, Hall, McKendall, & Cockrell, 2000; Spillane, Reiser, & Reimer, 2002; Timar, 1989). This often results in a transformation of intentions from what the policy makers want to accomplish and what the implementers do to enact the policy, potentially leading to outcomes that are very different from those intended by policy makers (Berman, 1978; Hall & McGinty, 1997; Placier, Hall, McKendall, & Cockrell, 2000).

Educational policy is as prone to these problems as any other policy area. Previous research is replete with examples of efforts to reform educational practice through implementing rigorous academic standards, trying to shift instructional practices from procedural to conceptual learning, and by trying to alter the nature of discourse within classrooms (Barnes, 2002; Kennedy, 2005; Spillane, 2004; Spillane, Reiser, & Reimer, 2002). These studies have shown that even in cases where school leaders and teachers have made a good faith effort to implement policy initiatives, they have largely failed to achieve the intended outcomes.

Further complicating matters is the question of the concept and definition of *success* when evaluating the implementation of a policy or program. As Berman (1978) describes, the “existential nature of policy” (p. 8) is that it changes at each level between the originators of the policy and those tasked with implementing any resulting programs. A policy’s success or

“goodness” (p. 8) may look different at different levels. Ideally, at the macro-level, where policy originates, success may be tied to measurable indicators; in the education arena, test scores are often the most available metric. So to a policy maker at the federal or state level, a successful policy may be one that leads to increased student achievement as measured on assessments such as the SAT, NAEP, or standardized state assessments. At the micro-level, where policy is implemented, the concept of success may vary widely—perhaps mirroring those at the macro-level; or, in other circumstances, due to multiple constraints on resources and organizational capacity, simple compliance with the minimum requirements of a policy may be considered a success (Berman, 1978; Lipsky, 1980; Weiss, 1995).

Those tasked with implementing policy are buffeted by local contextual factors that may help or hinder their implementation efforts. Resource availability, local political pressures, and the capacity of district and school leaders are among the factors affecting implementation at the local level (Berman, 1978; Lipsky, 1980; Weiss, 1995). Where some districts may be willing and able to aggressively pursue new policy initiatives and to change existing behaviors, others would struggle to try to fit new policy requirements into existing structures. The definitions of successful implementation of these two hypothetical districts would look very different.

Although micro-level implementers are sometimes hampered by their local contexts, macro-level policy makers are often unable to monitor local compliance with policy, often lacking the resources necessary to manage a potentially vast number of local implementing agencies (Berman, 1978). Despite these variances in defining “successful” implementation, it is reasonable to assert that, to a certain extent, a policy’s success may be assessed by how closely its implementation resembles that envisioned by its creators.

The ways in which policymakers communicate to implementers the substance and intent of their policies can be referred to as policy messages. When determining how to act on policy messages, implementers rely on previously established cognitive frames, or *schema*, to understand and develop actionable steps (Ali, 2006; Coburn, 2001; Spillane, Reiser, & Reimer, 2002). These frames are based largely on implementers' previous experience with other policies and programs. Implementers often seek to define new policies in terms of old ones with which they are familiar (Spillane, 2004; Spillane, Resier, & Reimer, 2002). This can pose a problem of implementation when new policies seek significant or even radical change to existing practice. It can also pose a problem to policies that shift the focus of previously well-established programs. This study examines local district implementation of state policy within the context of a new state program designed to induct beginning teachers through the use of mentorships. It does not seek to evaluate the new program, but instead to determine how the policy was implemented at the local level and the factors influencing that implementation.

From BEST to TEAM: Connecticut's teacher induction policy

Connecticut's *Teacher Education and Mentoring* (TEAM) program was developed between 2008 and 2010 to replace the former induction program: the *Beginning Educator Support and Training* (BEST). Beginning in the fall of 2010, all new teachers were required to participate in the TEAM program which involves intensive district-based mentorships. In addition to participating in a mentorship program, new teachers are required to complete and submit reflection papers around a series of five learning modules related to the revised Connecticut Common Core of Teaching (Connecticut State Department of Education, 2009). The implementation of the TEAM program occurs primarily at the local district level. Whereas under the BEST program the state provided voluminous guidelines, directions, and messages to

districts, mentors, and beginning teachers (Legislative Program Review and Investigations Committee, 2007), the Connecticut State Department of Education has streamlined the guidelines and reduced the paths for channeling information to districts about how to structure and implement the TEAM program. Because the change in policy at the state level shifts the locus of program structure and implementation from the state to the local level, it is left to individual districts to make sense of the policy and to enact a program within the means available to them. This study sought to examine how districts make sense of and implement state policy given the information and policy messages provided to them. It also sought to identify factors that influence how districts and teachers understand and implement the policy.

CONCEPTUAL FRAMEWORK

This study was grounded within an interactionist framework, focusing on education policy implementation at a “micro-level” (Berman, 1978; Coburn, 2006; Placier, Hall, McKendall, & Cockrell, 2000). The micro-level can be construed as the locus of policy action taken by those referred to by Kerr (1976) as “implementing agents,” (p. 17). This is in opposition to the macro-level, at which policy is planned, developed, and written by “authorizing agents,” (p. 17). This study drew primarily upon the literature on policy implementation and is couched within the context of induction policy, and mentorships.

Policy implementation: sense making and transformation of intentions

Policy scholars have examined implementation efforts and have catalogued numerous factors that influence how policies are carried out. At the macro-level, some of the influencing factors include institutional structure and organization (Wilson, 1989), resource availability (Lipsky, 1980), and power relations among groups (Hall & MicGinty, 1997). At the micro-level,

policy implementation may be influenced by the macro-level factors identified above but also by how individuals understand, conceive of, or make sense of a problem and the policy messages received from policymakers (Coburn, 2006; Spillane, 2004; Spillane, Reiser, & Reimer, 2002). Through a combination of macro and micro-level factors, policies often evolve (Majone & Wildavsky, 1978) in the implementation or they experience a “transformation of intentions” (Hall & McGinty, 1997; Placier, Hall, McKendall, & Cockrell, 2000) from what the policy makers intend and what the policy actually does. This study focuses primarily at a micro-level examining the role that sense-making plays in the implementation of policy locally and how policy may be transformed in practice from the intentions of state policy makers.

The TEAM program is structured in such a way that several theoretical constructs can be explored. At the district level, District Facilitators (DF) for TEAM are tasked with the coordination of district implementation. They often control the mechanisms and resources available for implementation. For instance, district facilitators coordinate the selection and training of mentors as well as the pairing of mentors with beginning teachers. Additionally, district facilitators often control funding available for program implementation and determine how to allocate those funds. The DFs fit Lipsky’s (1980) description of street level bureaucrats. Lipsky posits that policies change at the local level when implementers at the street level are tasked with making a policy work within the context of their available resources and capacity. Street level bureaucrats may change, alter, and ignore elements of policies for a number of reasons. The effects of these changes can sometimes result in a policy that bears little resemblance to the original intent, leaving some scholars to conclude that the policies as enacted *become* the policies (Berman, 1978; Lipsky, 1980, p. xii; Majone & Wildavsky, 1978). Street level bureaucrats are able to make these changes to policies due to the nature of their jobs. Often

local agents have high degrees of discretionary authority and autonomy. In the absence of strong oversights, local agents are able to make policies fit into the local culture regardless of the effects those changes have to the policy's intent (Berman, 1978; Lipsky, 1980).

Despite the role that district facilitators play in the implementation of TEAM, they largely serve as intermediary between the state and the teachers who are tasked with carrying out the mentoring practice. The substantive implementation efforts (or lack thereof) occur at the teacher level. Teachers may actively work to subvert or avoid the policy, fulfill only the procedural obligations of the program, or they may seek substantive outcomes from implementing the program (Timar, 1989). However, even well-meaning policy actors may fail to implement policy as intended by the policy makers due to misunderstanding or lack of organizational or human resource capacity (Spillane, 2004; Spillane, Reimer, & Reiser, 2002).

Cognitive and affective factors also play a role in the implementation of a policy. How a local policy agent frames an issue or policy, or how the agent defines problems influence how she or he proceeds with implementation (Coburn, 2001, 2006). Further, the ways in which policy agents make sense of a policy; how they define, understand, and see their role in the policy influences their implementation efforts (Ali, 2006; Coburn, 2001, 2006; Spillane, 2004; Spillane, Reiser, & Reimer, 2002). Factors such as an agent's personal history and previous experience (Spillane, Reiser, & Reimer, 2002) can influence how a policy resonates with the agent (Coburn, 2006). Resonance plays a role in both cognitive and affective processing of a policy (Coburn, 2006; Spillane, Reiser, & Reimer, 2002). To effect substantive change in behaviors, policies must create sufficient cognitive dissonance that the policy agents engage with the policy, but not so much that it creates a negative affective response and a rejection of the policy (Spillane, Reiser, & Reimer, 2002).

Research into policy implementation has focused largely on macro-level and institutional effects on policy implementation and has only recently begun to examine the role of sense-making (Spillane, Reiser, & Reimer, 2002). This study expands this area of the literature by examining at a micro-level how policy actors use the policy messages that they receive and how they understand and act on their roles during implementation. It examines the differences in understanding and sense-making among policy actors at the various levels involved with implementing the same policy: the state, district, and classroom. It seeks to illuminate how the policy actors implement the program, and how the implementation efforts match the intentions of the policy makers.

This study addressed the following research questions:

1. How is TEAM implemented in three different school districts?
2. What factors influence how districts understand and implement TEAM?

METHODS

This study falls within the category of a general interpretivist design. These methods are consistent with other policy analysis and implementation research (Hall & McGinty, 1997; Placier, Hall, McKendall, & Cockrell, 2000; Timar, 1989). The study drew upon multiple data sources including formal interviews with individuals at the state, district, and teacher levels. It also examined state and district documentation related to TEAM.

Participant selection and data collection

This study is based on in-depth semi-structured interviews with twenty-two participants: seven at the state level, three district level participants, and six dyads of beginning teachers and their mentors (two dyads from each of three districts). At the state level, I interviewed a total of seven individuals involved with the development and implementation of the TEAM program:

five program consultants at the Connecticut State Department of Education (CSDE) and two program contacts from separate Regional Educational Service Centers (RESCs) supporting the districts included in this study. The state level participants provided an overview of the program history; its mission and the practical and political evolution from BEST to TEAM. In addition to participant interviews, I examined state documents related to TEAM and BEST available through the state legislature, the CSDE website, or the TEAM program website. The five program consultants at CSDE were interviewed together as a group for approximately one hour and forty minutes. The program contacts from the RESCs were interviewed separately for approximately one hour each. The interviews for all of the state level participants were conducted between July and August 2011.

Three school districts were selected based on demographic characteristics. The districts were chosen based on their District Reference Group (DRG), a construct created by the state of Connecticut to group like districts across the state. DRGs are based on a number of demographic factors, primarily economic similarities (e.g., per capita income, median home price), as well as an educational profile of the district (i.e., average levels of educational attainment of residents). DRGs range from “A” to “I” with “A” being the wealthiest, most highly educated, to “I” being the most economically depressed and lowest average level of educational attainment. In order to control for contextual factors such as extremes of poverty or wealth, the districts involved in this study were selected from the mid-range DRGs, D-G. All of the districts included were from the same DRG. The specific DRG chosen is not identified as a measure to protect the confidentiality of participants.

In selecting participating districts, seven were initially contacted in the spring of 2011. Of that seven, one declined to participate outright and the other six agreed to participate. Of the

remaining six, one district agreed, but was unable to provide access to all of the required participants which excluded them from the study. Another district superintendent agreed but failed to return follow-up phone calls, removing them from the pool. A third agreed in the spring of 2011, but over the summer experienced a change of administration in central office as well as at the high school and middle school. The new administration withdrew from the participant pool. The remaining three districts agreed and participants were recruited successfully from the available beginning teachers and mentors.

Each district has a District Facilitator (DF) who is responsible for overseeing the planning and implementation of TEAM. Each DF was interviewed about his or her understanding of TEAM, how he or she developed their district plan, and how he or she envisioned its implementation. They were asked about the content of their district plan and asked about problems and opportunities that they experienced during the planning stage. They were asked about potential problems or opportunities that they have experienced or anticipated with the implementation efforts of TEAM. DFs were interviewed between August 2011 and February 2012. Each interview lasted approximately one hour.

At the school level, two dyads of beginning teachers and their mentors were interviewed from each district (a total of six dyads). The beginning teachers involved were either actively involved with TEAM or completed their involvement within the previous six months. Although this study initially planned to focus exclusively on social studies and English/Language Arts teachers, the realities of the available participants within each district made it impossible to limit to just these two content areas. While each district and participating school had enough beginning teachers to participate, the pool of available participants was too small to be selective. This led to the participant pool being a sample of convenience rather than a purposive sample.

Invitations to participate went out to every beginning teacher in the district at the secondary level (high school and middle school) based on a list of names provided by the district facilitator. In only one setting was there an over-enrollment of participants with three dyads responding that they would participate. In that case, scheduling conflicts made it difficult to interview the third dyad. As I had collected data from two dyads already, I did not pursue the third.

Appendix A contains a list of participants including their grade level and subject area. In the case of two dyads, mentors and beginning teachers were not paired based on content area. This was due to the availability of trained mentors within each district. Despite the minor variance in grade level and subject area of the participants, the nature of the interview questions focused more generally on the understanding of and experience with TEAM. It is unlikely that there would be any significant variability in a person's understanding and experiences due to their subject matter.

All of the teacher interviews were conducted individually between September 2011 and March 2012. Interviews lasted between twenty and forty five minutes. Beginning teachers and their mentors were interviewed separately in order to establish a greater sense of confidentiality and to allow each participant the freedom to speak open and honestly about items related to their counterpart. All interviews were conducted in the teacher's classrooms after school. Ten were conducted in person and two were conducted over the telephone. Approximately nineteen hours of recordings were collected. All interviews were recorded, assigned an alpha-numeric code and transcribed by a private transcription service. A master list of study participants was kept by the researcher on a secure, password protected computer.

Data analysis

Interview transcripts, thematic summaries, artifacts, and meeting journals were manually coded on two levels (Basil, 2003; Miles & Huberman, 1994). The first level of cut coding was based on an initial list of codes developed from relevant literature related to the areas of policy implementation and sense-making. During the initial coding process, other codes were developed as needed to supplement the initial list. After a first round of coding, a second round of pattern coding (Miles & Huberman, 1994) was used to condense the initial codes into different categories for analysis.

The state level interviews and documents served as one case to determine the intentions of the policymakers for the TEAM program. Each district served as a separate case and was analyzed separately. Once individual level analyses were completed, a cross-case synthesis (Yin, 2009) was conducted to report findings of similarities and differences among the cases.

Ensuring integrity of data and analysis

There are several elements that protected the integrity of the design and trustworthiness of the data. Interview and documentary data were triangulated across multiple sites and participants. Triangulation of data is a standard recommended practice in qualitative research (Patton, 1990). As explained by Fossey, Harvey, McDermott, & Davidson (2002) “[i]ts importance for enhancing the quality of data lies in the idea that gathering information from multiple sources (e.g., people, events) in multiple ways (e.g., interviews, observations) will illuminate different facets of situations and experiences and help to portray them in their complexity,” (p. 727). By using multiple data points in this fashion, a more complete picture of the state’s intentions can be drawn. At the district and teacher levels, the use of multiple cases allows for the consideration of contextual factors as influences to implementation. A final step in

the collection and analysis of data was the use of member checks for accuracy of statements and of meaning. Participants were consulted to clarify and/or verify the accuracy of the researcher's interpretations of some of the comments made during the interviews. As a result of those checks, I was able to edit some quotes for length and in some cases reworded a quote for clarity. All word changes or substitutions are noted by brackets.

Subjectivity

There are several factors related to the researcher's position, status, and previous experience that may influence the subjectivity of this study. During the data collection, I was working as a high school principal in a district within the DRG from which the participants were drawn. One of the participating districts was the one in which I worked, but it was not the school in which I worked. My position as principal privileged me in some ways in terms of gaining access to participants and in terms of differential power between myself and the teacher participants. State and district personnel were quick to respond to inquiries from a principal and may have been less so to a full-time researcher. There is also a sense among many administrators that they want to help each other in their own educational pursuits. I knew at least one person in each of the districts that ultimately participated. These connections eased my access to participants.

This ease of access however, was mediated by several elements of the study design. Foremost, the ability of participants to withdraw from the study or to refuse to answer any questions created an initial safety net. Additionally, an assurance of confidentiality and that I would not be sharing the teachers' statements with district officials created another layer of safety. Prior to each interview, participants were asked if they were participating of their own will or if they felt that they were under pressure to participate. None of the participants said that

they had been coerced in any way. Most of the participants laughed when asked that question and made jokes about “twisting arms.”

In addition to my position as principal, I was involved with the previous iteration of the state induction program, the BEST. As a beginning teacher, I was a member of the first cohort after the pilot stage. I was very successful and my portfolio became the exemplar in social studies which was used to train other beginning social studies teachers during the 2001-2002 school year. I was also trained as a BEST mentor and cooperating teacher and worked with several teachers as they went through their BEST years. In two cases, I was called in to work with teachers that had not passed their portfolios the first time. Because of my positive experiences related to BEST, I have maintained a favorable opinion of the program despite the numerous criticisms it has endured. As this study did not seek to evaluate or compare TEAM against BEST per se, my opinions on the merits of each program should not have created undue bias toward my interpretation of the interview data.

FINDINGS

In this section I begin with a general overview of the findings. First I describe how TEAM was implemented in the three participating districts, noting points of similarity and departure among the three districts. I then present the data from the state-level interviews and documents to create a picture of the intentions behind the TEAM program. I explain the state’s explicit theory of action for the program and identify and describe four main themes related to the program’s intentions that emerged from the analysis: (1) improved student achievement, (2) teacher professional learning and reflection, (3) centrality of mentorships, and (4) decentralization of authority. Next, using the four themes, I compare local level implementers’

understandings of the purpose of TEAM to the state level participants. I then discuss an additional theme that emerged from the local level interviews—that of perceiving TEAM as an accountability tool. Finally, I address factors that influenced how and what local-level participants understood about the purposes and procedures behind TEAM.

District implementation of TEAM

Each district participating in this study was from the same DRG. Sunnydale is a large suburban town with a total district school population of approximately 6,100 students across twelve public schools. Quaker Hill is a small suburban town with 2,700 students and five schools. Foreston was a small rural town with a total student population of just under 500 students in one regional school. Despite the differing population sizes, the socio-economic profiles of each district were similar.

In implementing TEAM, efforts varied across districts. Each district had a TEAM action plan that conformed to state guidelines. These action plans demonstrated an understanding of the procedural and structural requirements of TEAM. Each district had a District Facilitator (DF), whose role was to oversee implementation of the program. Among the responsibilities of the DF was to arrange the mentor matches between beginning teachers and their mentors. The individual chosen in each district and the additional roles they played in the district influenced the degree of their own engagement with TEAM implementation. For example, Sunnydale's District Facilitator, Donna, also worked as principal of a district elementary school. She was responsible for running her own school building as well as overseeing the TEAM program for twelve schools. Donna was the least satisfied with her involvement, expressing with some exasperation, her wish to do more with TEAM but that she felt prevented from doing so due to her other job requirements. She explained that she would like to hold periodic workshops for beginning

teachers and mentors but that her schedule prevented her from doing more than arranging mentor matches and attending the required state-level DF meetings. Ruben, the DF for Quaker Hill, served as an assistant superintendent. His role as DF was embedded within his primary job and closely aligned with his work in human resources and staff development. Of the DFs, he was the most directly involved, working with the principals in his district to help monitor beginning teacher progress as well as organizing periodic workshops for beginning teachers and their mentors related to TEAM modules. Working with only one regional school, Scott, the DF for Foreston, was from the smallest district. In his role he worked as a high school assistant principal as well as the district Director of Special Education. In his multi-role capacity, the extent of Scott's involvement was to arrange mentor-matches and to respond to technical issues that arose. When asked if he wanted to do more, he said no and that he felt satisfied with his level of involvement.

Where the most variability of implementation occurred was at the level of beginning teachers and mentors. While almost all of the participants at the local level were able to explain their understanding of the purpose behind TEAM in ways that aligned with state intentions, beginning teachers and mentors did not always follow the prescribed program requirements. In particular, the mentor dyads varied as to the amount of time spent together. On one extreme, Rosette, a mentor from Sunnydale, expressed her belief that the number of contact-hours required for each module were excessive. She explained that she believed fewer hours were needed and that she and her beginning teacher met for less time than was required. Although neither Rosette nor her beginning teacher, Jenn, directly stated so, it can be inferred that they falsely recorded the number of contact hours in order to fulfill the fifty-hour requirement. On the other extreme, Louise, a mentor from Quaker Hill reported meeting more often with her

beginning teachers, Cassie. In interviews with both Louise and Cassie, they described daily meetings and frequent check-ins. The other mentor dyads participating in this study fell somewhere in between the Rosette/Jenn, Louise/Cassie dyads. All reported meeting and fulfilling the required contact hours, but several beginning teachers also reported seeking out mentorship from informal mentors in their departments, a phenomenon explored further later in this paper.

The points of variability in how the districts implemented TEAM can be explained by several factors. Structural as well as cognitive and affective factors influenced how participants in each district enacted the TEAM program. What follows are the findings of this study related to how closely the understandings of TEAM participants aligned with the intentions of state-level program developers.

Alignment of state-level policy intentions and local understandings

Overall, the participants at the local district and school levels had understandings of the intentions behind TEAM that aligned with the important themes articulated by state level officials who were tasked with both the design and oversight of the TEAM program. Several factors contributed to this alignment including the simplicity of policy messages, the decentralization of authority from the state level to the districts, and the use of technology as a tool for disseminating information to all participants. Despite generalized understanding, most of the district and school level focused their efforts to understand the structural and procedural elements of the program. When probed further about their understandings about the program and its intent, their responses showed tacit rather than explicit understandings of the full theory of action, especially the connection of participation in the program to improved student achievement. Despite these differences, there was universal understanding of the fundamental

components of the program, namely a focus on teacher professional learning through the use of mentorships.

Below I discuss the findings from the interviews with officials at the state, with district TEAM facilitators, as well as the teachers participating in TEAM as either mentors or beginning teachers. First I outline the state's intentions for the TEAM program and explain how through their design of TEAM they seek to achieve their desired outcomes. I provide an overview of their articulated theory of action behind TEAM and then I highlight the important themes of the program. Then, I discuss how implementers at the district and school levels understand the purpose and procedures behind TEAM and the factors affecting their understandings. Finally, I discuss factors that affect how implementers understood and engaged with TEAM.

State level intentions for the program and assessment of district progress

It would be difficult to truly understand Connecticut's TEAM program and the intentions of the program developers without also understanding its predecessor, the Beginning Educator Support and Training (BEST) program. The longevity and prominence of the BEST program in Connecticut has shaped perceptions about any policy or program at the state level related to teacher induction. While BEST had partisans on both sides, its shadow still loomed over the design and implementation of TEAM. As will be discussed further below, previous experience with BEST served as a filter for district level officials and mentors as they sought to understand the new requirements of TEAM.

The BEST program grew out of a legislative requirement as part of the 1986 Educational Enhancement Act (CT PA 86-1), which required stricter standards for teacher certification and professional practice in exchange for increased minimum salaries across the state. Through the late 1980s and into the 1990s, the Connecticut State Department of Education (CSDE) developed

the BEST program to fulfill statutory requirements. The program required that all beginning teachers receive a mentor during their first year of teaching and that teachers in most content areas submit a portfolio demonstrating proficiency at the end of their second year (LPRIC, 2007). A teacher's continued certification was contingent upon successful completion of the portfolio. Each portfolio was scored and was given a score ranging from one to four, with two being the minimum passing score and four being the highest. The original purpose behind BEST was explained by Connie, a program consultant at CSDE who was involved in the development of both BEST and TEAM:

[I]n its inception, BEST was meant to be professional development...through the reflective process, teachers were supposed to, you know, engage and grow a little quicker than they would have otherwise.

However, the initial intent of BEST was lost on participants that viewed the portfolio requirement as overly burdensome and high stakes. Liz, a TEAM program contact at one of the Regional Education Service Centers (RESCs), explained:

And I think what happened was, while I think BEST was about assessment and about mentoring and helping beginning teachers become more effective, the portfolio process, I believe, became this big burden that was never meant to be. I truly believe it was just meant to take what a teacher is already doing over a series of lessons and talk about, and get that all together. That being said, it became this big monkey on teachers' backs.

In the minds of many beginning teachers, mentors, and districts, the purpose of BEST became an assessment rather than a process for learning. Sharing feedback she had received about BEST during the program review, Connie explained the complaints teachers had with BEST, which were voiced through the state's largest teachers' union, the Connecticut Education Association (CEA):

They were very unhappy with the BEST program and they represented teachers that felt that they basically were being abused by, for lack of a better word, by the program. It was too arduous. It was too much time. It wasn't related to what they did in a classroom.

Albeit, this was not the intention of the design of the program, it warped into something that was sort of this big mean assessment.

After the 2007 BEST program review conducted by a task force authorized by the Connecticut General Assembly, the program was eliminated and replaced by a new statute (CT PA 09-1, sec. 10-145o) requiring the creation of a program that would focus on “teacher education and mentoring.” It required the induction program developed by the state be focused on professional learning aligned with state standards and that mentorship remain the primary component.

After examining the interview data collected from the state-level participants, as well as documents related to the TEAM program, several important themes emerged related to the intentions and design behind TEAM from the state perspective. The first theme is the goal of *improved student achievement*. At its core, the primary goal of TEAM is to increase student achievement by leveraging teacher professional learning as the fulcrum for improving instructional practice. The second theme is *teacher professional learning and reflection*. Demonstrated in the structure of the program is the belief that teacher learning is collaborative and reflective in nature. This is evidenced by the requirement that each beginning teacher submit a final written reflection for each of the five modules. The third theme that emerged is the *centrality of mentorships*. The hallmark of TEAM is the mentor relationship. By pairing beginning teachers with experienced and trained mentors, the assumption is that the pairs will work together to identify and work on solutions to problems of practice. Through this collaboration, the mentor coaches the beginning teacher and provides someone to learn with. The fourth theme that emerged is of *decentralization of authority*. Where under BEST the state was the central authority on every aspect of the program, under TEAM the burden of providing

professional development, assessment and decision making about continued certification shifted each individual district. Below, I explore these themes as they emerged through the interviews.

Theme 1: Improved student achievement through teacher professional practice

In explaining the purpose of TEAM, state level officials were clear that the ultimate goal of TEAM was to improve student achievement by improving teacher professional practice. In a particularly cogent review of the intentions and theory of action behind TEAM, Faith, a RESC program contact responsible for serving as the state-level liaison with local districts, explained:

Faith: The purpose of TEAM is to improve student achievement.

Int: And how does it do that?

Faith: Through impacting a teacher's daily practice.... The teacher is going through the five module process. Each module is an extremely important element of teaching. It's all based on the common core of teaching, which is Connecticut standards, you know, for teaching.

And so, we ask our beginning teachers to go deep and analyze their practice in terms of classroom management and in terms of teaching and in terms of planning, in terms of assessing and then, finally, taking a look at their own professional responsibilities. All of those, taking a deeper look at those, being analytical about them. Wanting to know more about how they might improve their practice in any one of those areas and even asking them to tell us how their work with those modules would, indeed, impact student learning.

I think that's what leads to student achievement is we know that teachers need time to reflect, to step back and look at their practice and those are the crucial elements of effective teaching. Planning, teaching, assessing, classroom management, being part of a professional community. All of those should lead to an impact on students.

Faith's summary of the process encapsulates the principles underlying the program's design. It also provides a clear description of the theory of action behind the program. Additionally, her description highlights several of the other themes, namely the role of teacher professional learning and reflection, and the centrality of mentorships.

Faith's description of the ultimate purpose behind TEAM (improving student learning outcomes) was echoed by the participants in the other state level interviews. It is worth noting, and will be explored further, that for some of the individuals at the school and district levels, their primary focus and understanding of the intentions behind the program were on the elements related to the professional learning of the beginning teacher. Although it is clear that at the state level, the ultimate goal of TEAM is improved student outcomes through the leveraging of teacher professional learning, at the district and school level that connection is more tacit than explicit.

Theme 2: Teacher Professional Learning and Reflection

With improved student achievement serving as the ultimate goal of TEAM, the intervention point for trying to realize that goal is improving teacher professional practice. In the introduction to the 2010 Connecticut Common Core of Teaching, it describes the role of the teacher and her/his professional knowledge and competence in the effectiveness of schools:

The effectiveness of Connecticut schools depends upon skillful teaching. Teacher quality is one of the most significant contributors to student learning and achievement; what teachers know and do directly influences what students learn (*citations omitted*). Effective teachers have deep knowledge of their content area and can present core ideas of the discipline in clear, compelling ways. They engage students in stimulating, challenging learning, support exploration of content, and lead students toward developing critical reasoning and leadership skills. They create rigorous and relevant learning experiences characterized by higher-order thinking and the application of knowledge and skills in the world beyond the four walls of school.

Guided by the vision described above, one of the goals of TEAM is to provide a learning opportunity for beginning teachers to hone their skills. The structure of the TEAM program requires teachers to identify areas of growth in four of the five modules (the fifth being professional ethics and responsibilities is district designed and run). The process for each module is described for beginning teachers and mentors online at the program website. Under the

“Module Resources Tab” can be found the “Module Guidelines.” These guidelines spell out clearly the intent of the module process. The 2011-2012 TEAM Module Guidelines open with the following introduction:

The TEAM Module Guidelines provide an overview of a teacher-directed professional growth process in which teachers:

- develop new learning,
- use their new learning to improve their teaching and
- demonstrate how the changes in their teaching have a positive impact on students.

Throughout the module, teachers reflect on and document their learning and examples/evidence of student outcomes in personal journals. At the culmination of the module process, teachers draw on these reflections using examples/evidence to create a reflection paper that documents each of the following steps.

Defining what “learning” looks like, has been a topic of discussion at the state level.

Connie, a program consultant at CSDE explained:

And so we spent a lot of time in our module development team talking about exactly what new learning means and how, what did that look like. In fact we just recently spent a lot of time going through examples of reflection papers that we have been, that have been submitted this year. And looking at different ways that teachers would develop new learning. It’s not always about going to a text and reading something.

Julia, another program consultant also explained:

But it may be day to day data about your particular students, looking deeper into how do you implement a particular strategy and what the results are and then analyzing that data? So we're trying to get teachers to be far more reflective and that's what Connie is saying, about, the mentor becomes a really key piece here, helping that beginning teacher to develop that reflection and that ability to dig deeper into practice.

The goal of professional learning and reflection is prominent in the documents produced by the state and shared through the program website. Additionally, the module process is designed to reinforce a mode of thinking or thought process for beginning teachers that it is hoped will remain with beginning teachers over the course of their careers. Liz, a RESC program

contact, explained: “It is meant to help beginning teachers. What we have now—learn about, develop, internalize a process at looking at your practice with an eye to improvement.”

Theme 3: Centrality of Mentorships

The defining component of TEAM is that the process is built around a mentoring relationship between a beginning teacher and an experienced trained mentor. In fact, the only specific requirement stipulated by the legislation (PA 09-1, sec. 10-145o) is that it contains mentoring as a major component. The pairing of a beginning teacher with a mentor is seen as an essential component to the professional learning of the mentee—what Julia, quoted above, described as “a really key piece.”

The structure of the program establishes a minimum of fifty contact hours between the beginning teacher and mentor over the course of the five modules. This is a shift from previous practice where mentoring was required but with fewer guidelines. As Dana, a TEAM program consultant at CSDE, explained:

There is written into law a requirement of a minimum of 10 hours contact time, per module. So 50 hours over the five modules. But again, that's also a culture of thinking that needs to develop, right? Because you know there's still a lot of mentors out there that were BEST mentors, and all they were required to do was say you know, I'm your mentor and now call if you need me and let me know-- and don't realize that there's much more that they need to do. So this is a shift in thinking that needs to take place over time, and I think over a few years will probably, hopefully, impact that.

Each component of the TEAM program is supposed to involve both the beginning teacher and mentor. Through the TEAM website, the CSDE provides an online introductory video that describes the TEAM process (accessible under the “About Us” tab at ctteam.org). The video refers to the “mentor module” process and explains that the mentor and beginning teacher should work together to identify a problem of practice, to develop an action plan, to monitor the implementation of the plan, and then to reflect on the process.

Whereas under BEST, there were no hard requirements for what mentors did or how often they met with their beginning teacher, under TEAM the requirements are more explicit. Additionally, the online system that beginning teachers and their mentors use to record their meetings allows for easy monitoring of progress for district administrators. The pair must record their meetings and keep logs of their conversations. Although these logs need not be extensively detailed, they provide a level of accountability for mentors and beginning teachers to ensure that they are meeting. Mentor pairs that do not meet regularly are subject to monitoring at the district and school levels.

Theme 4: Decentralization of Authority

Under the BEST program, the state was responsible for every aspect of the program including program development, developing training for mentors, creating and running seminars for beginning teachers, serving as the contact for problem solving, collecting and assessing the portfolios. Under this structure, BEST was controlled through a central authority and districts, beginning teachers, and mentors expected all of their information and requirements to come down from the state. Operation of the BEST program was expensive and the budget of the program was cut drastically after the first few years. The Legislative Program Review and Investigations Committee (LPRIC) that reviewed the BEST program detailed the budgetary history of BEST showing a budgetary high of \$10 million dollars for fiscal year 1991 dropping drastically to approximately \$3 million for fiscal year 1992 and fluctuating until fiscal year 1999 (dollar amounts listed are expressed in actual dollars not adjusted for inflation). As of fiscal year 2007, the last year of BEST, the LPRIC noted, “The most current annual expenditure amount was just over one-quarter of the program’s real-funding peak, which was equivalent to \$14.6 million in today’s dollars. BEST’s expenditures have been declining in real terms since FY 1999,

after fluctuating throughout the 1990s” (LPRIC, 2007, p. 20). With annual reduction to the program budget, BEST lacked the resources it had to provide the same level of supports in earlier years. The costs of the program to the state were significant. Although not directly addressed by the LPRIC, the cost of implementing the extensive recommendations provided in their report, would have incurred significant additional costs to the state if CSDE maintained responsibility for each aspect of the program.

Unlike BEST, the design of TEAM shifts program control from the state to districts. Districts are responsible for structuring their TEAM Action Plans, for determining levels of acceptable performance, for providing mentors, and for providing professional development. This has been a significant change for many districts as Liz, one of the RESC staff noted:

I know that’s one of the big concerns in the districts you hear across the state is what’s going to happen ‘cause that used to, to a certain extent, but it really created parity across the state when the state controlled it. I know now, talk about a shift in thinking we’ve spent a lot of this year retraining mentors, updating mentors and then training mentors. And one of the things with the updates comes loud and clear is when participants get frustrated about some of the things they hear, they want to blame the state. And why isn’t the state doing this and why isn’t the state doing that? And that’s a shift in thinking. Our state has to shift that thinking. It’s no longer the responsibility of the state. The state has oversight. The state is there definitely. They are trying to support the districts in as many ways as they can. But it’s really a district program. It’s what your district wants to do.

Summary

Each of the themes identified and discussed above convey the fundamental principles and practices underlying the state’s intentions for the TEAM program. In determining how local implementers understand and make sense of the program, it is helpful to look for instances of alignment with and departure from the state’s intentions. In comparing the alignment between the intentions of state level program officials and district and school level implementers, it is useful to use the themes highlighted above as anchor points (or lenses). The next section examines the understandings of district and school level implementers.

Making sense: local implementers' sense-making and understanding of policy intentions

When analyzing the data from the district and school level interviews, there were several points of alignment and disconnect between what local level implementers understood compared to state level intentions. Overall, the local district and school levels cited a teacher-centric view of the purpose behind TEAM. All of the participants cited teacher learning as the purpose and intention behind TEAM with little direct reference to the impact on student achievement. However, when asked if they believed improved student learning was also an intended outcome, their responses indicated tacit assumptions that professional development would lead to improved student achievement, but that the primary focus of the program was their own professional learning.

Local-level understandings of TEAM's role in promoting improved student achievement

Of all of the district facilitators, mentors, and beginning teachers that participated in the study, only one listed increased student achievement as a goal when asked about their understanding of the purpose of TEAM. Typical responses from the remaining participants cited teacher-level outcomes such as “refining their skills,” “honing their craft,” and “develop[ing] a repertoire of what they can use.”

When prompted about whether or not they saw a connection between what teachers are asked to do through TEAM and increased student achievement, all said yes; however, when asked to provide examples of how they knew student outcomes were improved, most answered in terms of teacher-level improvement. For example, Scott, a technology education teacher in Quaker Hill, stated:

I saw some [improvement] definitely, especially with my planning. I became a lot more thorough and even with my observations that I had with my principal here. She said I have improved some with the way I plan my lessons. The way I

think out my lessons. How I want [my students] to go from A to B to C, you know, in order.

Scott's focus on his own improvement was echoed by most of the other beginning teachers when asked about the link between what they are required to do through TEAM and student learning. The closest response linking her learning through TEAM and improved student outcomes was provided by Monica, an English teacher in Foreston, who focused on reading differentiated for one of her modules:

Last year I definitely felt like, at the end, my students had improved a lot in the areas that I chose. The first [module], both of them, focused on reading differentiation, and I felt like they definitely got better at it. For the second one I did lit circles and they got better at discussing literature, and noticing things in literature. I think before I was spoon feeding them more.

Another beginning English teacher, Jenn from Sunnysdale, focused on differentiated instruction and explained that she saw improvements in student learning as a result of her module work:

Yeah improvements... for sure yeah, and now that I've carried it on it's kind of been instilled in my mind that I should be doing that and I do that. It's been helping the kids now because even if say I do come up with an activity or whatever and it doesn't really reach every different learning style, well then I'll see that. You know, Bobby or whoever doesn't really understand how to do this, and then I can take them and give them another option to do like the same ideas or the same... reach the same goal that was set, but in a different way, individually. So I'm more willing and able to do that one-on-one if a whole class thing doesn't work.

Although all of the beginning teachers said that they saw a link between their module work and improved student learning, they struggled to provide specific examples. In addition, the mentors in the study were generally positive that improved student learning was happening in their mentee's classrooms but they were unable to cite any evidence. When asked if she saw evidence of improved student learning in Jenn's class, her mentor, Rosette was honest in her appraisal:

That's the thing; I don't know. I wouldn't be able to see her test scores, or stuff like that. Just based on what she tells me is what I am aware of. I observed one class with her last year, so I was able to see if they were understanding what they were getting and that type of thing. Beyond that, I don't know.

The difficulty that beginning teachers and mentors had in identifying direct links between the beginning teachers' work on the modules and improved student learning may be explained by the type of goal that they set and the type of data that each goal produced. As Maria, one of the mentors from Foreston noted:

It's more broad-based student outcomes, you know, did you have higher engagement, things like that. You know, so it's -- and I guess it also depends on what the teacher's focusing on because if they write in their goal, you know, to raise scores, well, then, yeah, it's explicitly based on student outcomes. But if their goal is, you know, to increase rapport, or to do better classroom management, then there isn't as a direct, you know, kind of data driven connection between the two.

Although improved student achievement was not cited explicitly by the local level participants as a desired outcome of TEAM, it was clear through their responses that there was an implicit assumption that student learning would improve with improved teacher practice. What was more evident to them was the link to teacher professional learning and the role of reflection in that process.

Local-level understandings of intentions for teacher professional learning and reflection

All of the local level implementers expressed their understanding that at some level, the TEAM program was intended to improve the teaching of beginning teachers by requiring them to learn and reflect on practice. At the district level, Donna, the district facilitator in Sunnydale, explained that she saw the purpose of TEAM as a process of reflection and developing "cognitive skills in teaching"

It's really to instill the importance of self- reflection, really building those metacognitive skills in teachers that none of us really have time for unless we have to, and

understanding the whole recursive teaching/assessment cycle that we all need to engage in.

Rosette, a mentor in Sunnydale, echoed Donna's perspective:

I feel like the biggest part is definitely learning new strategies that maybe they just didn't know before, or different ways that they can approach their classes and problems that they're having in their classes. When you're teaching normally, you don't really have a place for that.

Cassie, a beginning English teacher in Quaker Hill emphasized the reflective component of the program:

From what I gather and from what I'm experiencing, it's a very reflective process. I feel like it's very geared toward what I'm actually doing with the kids at the moment and having me reflect back on what I'm actually doing. So that's part of it, and then the other part of it that I think of is collaborating with my mentor quite a bit.

Taken together, all of the participants described the role of professional learning and reflection on practice as a major part of TEAM. Many of the comments related to the learning that took place were also in the context of the mentor relationship. For the beginning teachers and mentors, the professional learning process occurred individually through reflection, but also collaboratively through discussion with their mentor or other colleagues. Several mentors also noted that they learned through the process and that working with their beginning teacher forced them to reflect on their practice. As Maria, one of the mentors from Foreston, noted:

Being a TEAM mentor has actually made me a better teacher. Because it makes me think about okay, for this quarter ... and I almost informally do modules each quarter. Each quarter now, I say, "Okay, what little strategy am I going to try this quarter?" And it made me actually a little more formalized about the strategies I choose and assessing how they're working.

Local-level understandings of the centrality of mentorships

As noted earlier, most of the beginning teachers and mentors discussed professional learning within the context of mentoring. Structurally, it was evident that the participants at the district and school levels understood that the mentor relationship was the center around which

the program was built. Each of the districts had established TEAM action plans, in which they are required to describe the process they use for mentor selection. All three districts required prospective mentors to apply. In many cases, mentors were recruited at the building level by the principal. In all three districts, each beginning teacher was assigned a formal mentor; however, not all beginning teachers were assigned a mentor in their content area. Mentor assignment in each district was based primarily on availability and depended on the pool of available trained mentors.

In describing the purpose of the mentorships, the participants viewed the mentoring component as the fundamental trait of the program. Cassie's mentor Louise explained that she believed the purpose was: "To link a beginning teacher to a teacher who is more experienced and has run the gambit of all the things and to actually go through the different process of every day teaching elements."

Allison, a mentor from Sunnydale described her understanding of the role of the mentor relationship:

That the mentor process, and the learning process, and the new teacher experience would be more meaningful, and would be better for the new teacher if they had a real person to kind of work through these situations, and these, the different modules with, on a larger scale, and with a more hands-on approach, as opposed to just, do your portfolio your second year, and send it away, and hope you pass. I think the intention is to help new teachers kind of hone their craft, and through the mentor process, gain perspective and experience that they might not be able to have the same insight if they were more independent.

Rosette, another mentor from Sunnydale compared the experience under TEAM with her own experience going through BEST:

I felt like when I was in BEST, and even beginning, I didn't really have someone that I could go to.... I wasn't assigned a person, and I feel like for some isolated teachers, that would be a problem. It would be easy for them to just flounder. I think with the [TEAM]

program, it gives you someone to bounce ideas off of, or another person who will informally observe you. I think that that's helpful.

Despite being positive about mentoring in general, Rosette continued to explain that she believed the TEAM program required too much mentoring time:

They require you to have 50 hours of contact time, and I think that that's a lot. I think that it might be too much. That's asking for an hour a week, and I think that even, sometimes we'll meet together, and we'll get our conversations through in 30 to 45 minutes, but we feel like we have to keep going to make sure we get that hour. I think that that's a lot of time.

Rosette's perspective on the hour requirement was not shared by all the mentors. Barbara, a mentor from Foreston, explained that the required hours were not enough for her mentee. Unlike Rosette's mentee who has to do all five modules, Barbara's only needed to do two:

She could probably use double and you know, we're supposed to have like ten and ten, and we'll probably wind up with like 35 or so this year. We don't even keep track of them all. But she needs that talking. So you, you know, you do what you've got to do.

The amount of time that beginning teachers and their mentors spent together varied and was determined largely by the individual choices and comfort level of the beginning teachers as well as through the strength of personal connection between the mentor and beginning teacher. For example, Monica, a beginning teacher in Foreston, explained that she did not spend the full amount of time with her mentor:

For the first module, we met pretty regularly, once a week, or every other week. But then for the second one, I was much more independent, and we would really only touch base 'cause we had the same lunch together. So that was 20 minutes.

Monica's mentor was not from the same content area, and Monica reported going to others in her department for additional help. Although not specifically spent with her formal assigned mentor, Monica worked with other teachers in an informally. In contrast, Cassie, beginning teacher in

Quaker Hill explained that she had “such a close relationship” with her mentor that they met daily.

Local-level understandings of the decentralization of authority for program implementation

The beginning teachers and mentors did not explicitly discuss decentralization of authority; however, their description of where and to whom they went when they had problems or questions, supports the theme. Under BEST, beginning teachers and mentors that had questions or problems were required to contact either the state-level teacher-in-residence or the BEST program leader for their content area, both of which operated out of the CSDE. Under TEAM, evidence suggests that the majority of questions were asked and answered within the district.

At the district level, each of the district facilitators stated that they consulted with the TEAM program contact at their regional RESC if they needed assistance. When asked about what type of questions or problems they brought to the state, all of the district facilitators commented that initially their biggest concerns related to the functionality of the TEAM website and about clarifying which teachers belonged on which stage of the program. When the interviews were being conducted, the state had not yet developed module five related to professional responsibilities. All of the district facilitators expressed the desire to know more about what the module would look like and what their responsibility would be in its implementation. Despite some trepidation about an initial lack of information coming from the state about TEAM, all of the district facilitators were complimentary of the state’s responsiveness with subsequent concerns. When asked how well he thought the state communicated its intentions for TEAM, Ruben, district facilitator from Quaker Hill, stated:

Initially I don’t think very well at all. That year that we were kind of in limbo there was very little coming from the state. But I think once they really got it together in plan, I

would say from my perspective, it's one of the best things the state has done in my recent memory, right from what the modules look like and then the technology behind it with the electronic system. I can't commend them enough.

The beginning teachers and mentors all stated that they consulted their district facilitators with any programmatic questions or questions related to certification. None of the beginning teachers or mentors said that they contacted anyone at the state level during the module process. All of the beginning teachers and mentors said that they were satisfied with the responsiveness of their district facilitator and stated that their questions were resolved promptly.

When looking at the pattern of responses from implementers at the district and school levels, there is ample evidence to indicate that TEAM is being implemented locally with minimal direction or direct involvement from the state. Whereas under BEST, the teachers-in-residence and BEST content area leaders were responsible for answering all questions from beginning teachers and mentors in the state, under TEAM the district facilitators are the gatekeepers of information. Due largely to this structure, local implementers reported satisfaction with the timeliness of responses when they have questions.

A sinking suspicion: Teacher misunderstanding and perceptions about the role of TEAM as an accountability tool

Although almost all of the beginning teachers and mentors interviewed cited professional learning as the primary goal of TEAM, several participants stated that they believed accountability to the state was the primary goal of the program. One of the beginning teachers from Sunnydale, Tim, explained that he viewed TEAM as a state-level accountability tool:

Well, I think that it's a way to kind of like, obviously in theory the idea is going to be to kind of keep tabs on new teachers to make sure that they're achieving professionally at the level that they should be....I think it is an accountability tool, just to like kind of a keep tabs on you kind of thing.

Anna, a beginning teacher from Foreston, also believed that TEAM was, in part, a state level assessment of beginning teachers:

I think that the purpose is, well, I think the state needs something that they can evaluate you and say, “You passed this.” But I think that it’s also, it kind of represents the things that they want you to be able to do as a teacher, and the skills that you should have.

Although the state has expressed in multiple venues that the intention of TEAM is not to serve as a state level assessment, these two teachers clearly believed that it is. Looking deeper into the experiences of the two teachers above, an explanation of where their impressions originated can be found not by their misinterpretation of information provided by the district or state, but by their total disengagement from those messages. Both Tim and Anna had heard about the BEST program from co-workers and their mentors. Both were familiar with its structure, with its portfolio requirement, and with the high stakes assessment associated with the program. Both also worked in districts that provided at least one initial orientation session for beginning teachers involved in TEAM. When asked about what meetings or trainings they attended related to TEAM both said “none.” Tim explained that he waited until after football season, when he was no longer coaching, to start his work on TEAM. He admitted that he was behind other beginning teachers in his district when he started and that he relied on another beginning teacher in his building to show him how to navigate the website to show him what he needed to do. In addition to not attending district meetings, he did not explore the TEAM website or ask for help from his mentor.

Anna’s lack of clarity and misunderstanding of TEAM also stemmed from her non-engagement with policy messages from the state and district. In addition to not attending district level meetings or other orientations, she seemed to dismiss the role of electronic communications as less valid than face-to-face interaction:

Int: So, you don't really think that either the state or the district communicated any, either expectations for the performance, or of the rationale behind the program?

Anna: I think probably there were emails. There were a lot of emails, I got emails all the time from TEAM, but that wasn't something that was communicated to me in person.

Anna's recognition that there were "a lot of emails" and her response to those emails seems to indicate that there was not a lack of communication but that she did not value that form of information dissemination, preferring "in person" interactions.

As is demonstrated by the two examples above, the understandings of local implementers of TEAM were shaped by other factors beyond policy messages from the state. A further discussion of factors influencing the understandings of district and school implementers is the subject of the next section.

Making do: factors affecting local implementers' efforts with TEAM

Several elements affected how the local-level participants understood and acted on the TEAM program; some based on policy messages and message pathways—what information and how it was received from the state, some due to district structures and supports, mentor availability, and others due to cognitive factors such as previous experience and affective dispositions.

Message pathways—dissemination of information from the state

One of the factors affecting how TEAM was understood was the delivery of policy messages from the state; namely, what was communicated and how it was communicated. There were several avenues through which the state communicated its intentions: state level trainings, the TEAM website, and by direct contact with district facilitators. These avenues provided direct messages to district facilitators, mentors, and beginning teachers. All of the district facilitators were required to attend multiple trainings and meetings over the course of the year. Additionally,

all of the mentors were required to attend training under TEAM. New mentors, who had never been mentors in the past, were required to attend a three-day training session in which the purpose and structure of TEAM program was reviewed. Mentors who had been trained under BEST were required to attend a one-day update training. These trainings were held regionally through the RESCs and no one could serve as a mentor or district facilitator without attending these meetings.

According to the local implementers, the most effective tool that the state used to disseminate information was the TEAM website. The website served as a clearinghouse of information providing information about the history of induction in Connecticut, an overview of the TEAM program (including an online video presentation), as well as specific information and help for each module. Despite some initial technical glitches, the website became the key source of information for most of the local implementers. Steve, the district facilitator for Foreston described his use of the website:

I thought the website was excellent. And they also had, like they had a log of communications that had gone out. So I could go back if I had questions. If you go on the website, before, as a district facilitator when you log in, there's, there are old communications and they are still, it's kind of archived so you can kind of go through and say "oh here's a letter that came out at such and such a time"....[I]f you go on there all those letters are, are archived on there. So you go back, if you lose something, or can't remember [what] was in your email. You know, letter templates and things like that. So it's nice to have that archive of information. I've used it a couple of times.

Rosette, a mentor in Sunnydale, also expressed satisfaction with the website:

The website is the most helpful tool. You have to put everything on the website, and it spells out for you what you have to do. They also send us e-mails pretty frequently, reminders as to where you should be, and that type of thing. It's pretty helpful.

Cassie, a beginning teacher in Quaker Hill, also described her reliance on the website for information:

I've used the website a lot for help. I've been kind of just resourcing, using resources online, but I did talk to a few of the teachers that have gone through parts of it already that are here.

Although most of the participants spoke highly of the website, not all of the feedback was positive. Donna, district facilitator from Sunnydale was generally positive about the website but stated that it would be more useful if it had "exemplars" for each module online. The most vocal critic of the website was Barbara, a mentor in Foreston. She expressed her frustration with the website based on some technical problems she experienced early in the process:

I think, and then they've had a number of times when the access online has been fried.... We started ... last school year, and you couldn't even get on there. It was crazy... it was ridiculous having a new teacher and not being able to access the program when she started school. You know, it's crazy.

Despite her criticism, Barbara conceded that her frustration focused on the experience of one teacher and that others in her building did not have problems accessing the system.

Another factor was the implementers' perceptions of the clarity of policy messages from the state. When asked about how clearly the state communicated their intention for TEAM, there was a wide range of perspectives; from participants who said that they thought the state was very clear to those that said they thought it was not clear at all. District facilitators were most likely to say that after some initial questions about the structure and function of TEAM, they were satisfied with the clarity of the state's communication. As Ruben noted earlier in this paper, once the program was more developed at the state level, he believed their communication was clear.

Least likely to say that the state's intentions for the program were clear, were beginning teachers and mentors. None of the mentors or beginning teachers reported having any direct contact with the state. Instead, they all identified their district facilitator as their contact person. For example when asked how responsive she believed the state had been to her, Rosette, a mentor in Sunnydale, answered:

I haven't worked with them directly, but Donna [the district facilitator] said during that meeting that she got responses back pretty quickly, especially from people who are high up in the chain of command, I guess.

When considering the decentralized nature of program management and implementation of the TEAM program, it makes sense that beginning teachers and mentors would not have a sense of the state's intentions for the program beyond what is presented on the website. The structure of TEAM leaves the onus of responsibility for information dissemination, local training, and professional development to the districts and the district facilitators. Although the website has a lot of information about the history and intentions of the program, the beginning teachers and mentors in this study did not use those parts of the website. As Tim, a beginning teacher from Sunnydale noted:

So I would like sit down with [my mentor] and we'd go, "All right, let's kind of go through this site and see what we have to do." And there was, you know, there was definitely like I'm sure a thing right away about, on the front page of Team that was like, you know, what the goals were or something like that. I'm sure we had to read something, but honestly like I think we probably skimmed through to find out exactly what we had to do to have to submit. You know?

The quote above demonstrates another pattern in the responses—those teachers that said they were unclear about the state's intentions for the program, or who stated that they believed the state was unclear with its communications were also least likely to engage fully with the available information; in particular, the information on the website.

In-district structures and supports

One of the most influential components of how the districts participating in this study implemented TEAM was the way they structured lines of responsibility, in particular who they chose as District Facilitator (DF). Each of the district facilitators that participated held other positions within the district. Donna, the DF for Sunnydale, was principal of one of the district's

twelve schools. Steve, DF of Foreston, also served as his school's assistant principal and as the district's Director of Special Education. Steve's role was unique in that his responsibilities extended only within his school. As a regional school, he did not serve as DF for any districts sending their students on to Foreston for middle and high school. Ruben, DF in Quaker Hill, was also assistant superintendent for the district with five schools. Of the three, his role as DF was most closely embedded with his day-to-day work. Ruben frequently checked the TEAM website and discussed the progress of beginning teachers at district administrative meetings. He followed up as needed with phone calls and personal visits to principals as well as beginning teachers and mentors. His oversight of TEAM implementation was most closely aligned with what the participants at the state level described as their ideal district monitoring.

Of the three, Donna was clearly frazzled and apologized multiple times during her interview for being less prepared than she felt she should have been. As a building principal, her first job was to be the educational leader for the school and, having no assistant principal, managing the day-to-day operations. Her comments frequently cited lack of time as a reason that she was not fulfilling her role as DF in a way that she thought she should. For example, when asked "How directly involved are you with beginning teachers and mentors?" she responded "Honestly, very little." She described how she spent her time trying to untangle the "logistical nightmare" or who belonged in TEAM, at what stage, how many modules they needed to complete, and how to work with the certification office when the teachers were done. She described in an ideal world what she would like to do:

Oh, I would love to be able to have a series of... and I did this in [another district] as the District Facilitator for BEST years ago. I would love to have kind of a series of workshops or whatever we want to call them. Not really workshops but meetings because it wouldn't be a stand and deliver. It would be trying to get people to talk about what they were doing and how they were doing it, share ideas, just have those kinds of opportunities for all of the people involved.

I'm sure not everyone would want to, but at least get it out there. From there I could see a library of information being developed. Things like that. That's what the ideal situation would be and that is a major drawback in having a building principal for District Facilitator. It just is.

She later commented on her "envy" of DFs in other districts whose sole role was to coordinate

TEAM:

I was always envious of the people who would attend the DF meetings who, there were a number of districts such as [another district], and I worked in [that district] so I know how they work—they have a retired teacher who's the DF. She's wonderful and has all the time in the world and loves this. So when I hear about people like that or even central office people, I think those are the people who should be doing this, not a building principal. I feel badly that I can't... I'm an overachiever so I feel badly that I'm not doing more than I'm doing.

Mentor availability

Another factor influencing the experience and perception of TEAM for beginning teachers and their mentors was the availability of trained mentors within the same content area. Of the six mentorship dyads in this study, three did not have mentors and beginning teachers in the same content area. This seemed especially true for teachers in elective areas such as world language and technology education. In particular, Foreston, which was the smallest school of the three, was unable to match Monica, a beginning English teacher, with a trained mentor in English. Instead she was matched with a science teacher. World Language teacher Anna, was matched with Barbara, a special education teacher. Barbara explained that Foreston was affected by frequent turnover in staff and that trained mentors were not always available:

Initially we didn't have very many mentors. Then we got pretty good. And then we had a big turn over in staff again and lost probably about half of them. Right now we're in pretty good shape.

Additionally, in Quaker Hill, beginning technology education teacher Scott was matched with Eva, an English teacher.

While the beginning teachers and mentors did not express dissatisfaction with out-of-content matches, they expressed the feeling that it would have been helpful to work with someone in their area. Instead of content-specific work, these dyads focused on general topics related to developing PGAPs and working on the modules. Still, the beginning teachers did find value in the mentor match with someone outside their content area. As Scott from Quaker Hill explained:

For me it would've been particularly helpful if I could have another mentor that was in my content area. Although I will say that I think I did benefit from having someone that was outside of my content area because I was able to see a whole different view. Because English class is a lot different than Tech Ed and she was able to give me a lot of pointers on some things that I wouldn't necessarily thought of or I have seen used in these types of classes.

The beginning teachers in these out-of-area dyads also reported seeking help from someone in their content area in addition to their mentor. In regards to her mentor, Monica said that her mentor "wasn't really my go-to person for English-y kinds of stuff." She sought out help from her department head. Scott explained that he went to a veteran technology education teacher for help as well. The primary role fulfilled by mentors in these out-of-content dyads was to provide logistical help. As Anna explained:

She helps me with the reflection paper, like making sure that I'm not getting too technical with my French stuff or, you know, explaining things so that no one else can understand me. And [also] dealing with situations in classes and some problems that I'm having and stuff like that. ...I ask her about ideas that I want to put in it, like should I include, you know, that this project took me way longer than I thought it would to plan and to correct? And also, with more technical stuff like she'll tell me if the sentence just doesn't make sense, or something I wrote is too confusing.

While the beginning teachers expressed appreciation for the help they received from their mentors, it was clear that they would have preferred to be matched with someone in their content.

Previous experience of local implementers related to induction programs

In the case of implementing TEAM, the participants' understandings were influenced to a large extent by their previous experience or knowledge of the BEST program. Each of the beginning teachers had heard of the BEST program although not all of them had a clear picture of what BEST required. All of the district facilitators and mentors had direct experience with BEST, either having gone through BEST as beginning teachers, serving as BEST mentors, or overseeing BEST in their districts. Although previous experience did not seem to influence how districts and teachers implemented TEAM, it did influence their perceptions of the quality of the program, especially as it compared to BEST.

The mentors that participated in the study expressed universal preference for TEAM over BEST. Some participants, like Eva, a mentor in Quaker Hill expressed her preference for TEAM simply: "TEAM is better than BEST." Eva had previously been trained and served as a mentor for twelve years under BEST. Maria, a mentor from Foreston, had worked under BEST for two years. She described what she believed was the reason the BEST program was replaced:

My understanding is that BEST was a little too onerous and it was just too much to expect a second year teacher to do. Also, my impression of it was that to expect a second year teacher to be doing BEST practices in their second year, wasn't really a reasonable expectation. But to move into TEAM where the expectation is that they're improving and being reflective is a much more reasonable expectation.

The comments above were typical for the other mentors: all had either mentored under BEST or completed a portfolio themselves. They all believed that TEAM was more reasonable a task to ask beginning teachers.

Of the beginning teachers, none had worked under BEST but all had heard about it from their colleagues. Monica, a beginning teacher from Foreston, heard about the BEST program

from her brother, a teacher in another district who completed BEST several years prior. It had been described to her:

That it was awful, that it was very time consuming, and that people were really stressed out all the time, and that it was a struggle to be a teacher at the same time that you're trying to complete the BEST program.

Other beginning teachers in the study expressed similar ideas, using words such as “tedious,” “stressful,” “confusing,” “harder,” and “a pain in the ass.” Based on what they had heard from others about BEST, they expressed their appreciation of what was required under TEAM.

Despite an overall positive view of TEAM, there were two participants that were somewhat critical of TEAM when compared to BEST. Specifically, they expressed a desire for more accountability for beginning teachers under TEAM. They said that despite the cumbersome nature of BEST, it provided a level of accountability that they believed was lacking in TEAM.

For example, Rosette, mentor from Sunnydale, noted:

I definitely like the idea that there's a mentor that you have to work with pretty intensively. I just wish there was maybe a little bit more accountability on the part of the beginning teacher. I just feel like it would be very easy to fake it if you wanted to.

Rosette's mentee, Jenn, expressed a similar thought:

It was, it was definitely positive like there's nothing bad about it. I just think it, there should have been more accountability for the people doing it. Obviously as a person doing Team, I wasn't going to be like “Well, you should be, the final paper, I mean in reality how, like there's no evidence for what you're saying. So I think it should require some kind of evidence like I know BEST required a copious amount of evidence, but at least to say “Give an example of three like different levels of students with the same assignment” like in the instruction or something. Like, give student examples and some kind of evidence of what you actually did.

Rosette and Jenn's desire for increased accountability was unique among participants. When asked about their thoughts related to the level of accountability for beginning teachers, the remaining mentors and beginning teachers stated that they believed it was a good balance.

Affective dispositions among beginning teachers participating in TEAM

One of the factors affecting local implementation of TEAM at the classroom level was the affective disposition of the beginning teachers—in particular, their individual attitude toward the process. The mentors that participated in this study were candid when discussing their experiences with their beginning teachers as well as with others they worked with in the past. As is likely to be expected, the mentors described a continuum of beginning teacher attitudes toward TEAM ranging from those who were very conscientious and anxious about the program to those who, as Allison, a mentor from Sunnydale put it: “the only reflection he was interested in was the one he saw in the mirror.”

During the interviews, several mentors drew comparisons between past and present beginning teachers and their attitudes toward the process. In each case, the mentors contrasted their experiences with a conscientious beginning teacher and with one that required greater more monitoring. For example, Rosette a mentor in Sunnydale, compared her beginning teacher with one she worked with last year:

My mentee last year was surprised by how simple it was. She always kept saying, “Isn’t there more that we should be doing?” I think it was also easy for her because she was a very conscientious person, so she took it seriously and did exactly what she was supposed to do. This year I feel like I have to do more prodding and mentoring then I had to do last year. I guess maybe he’s just waiting for me to guide the process until he’s gone through one module. I guess we’ll see how it goes.

Additionally, Barbara, a mentor from Foreston, described how in the previous year she ended up mentoring three beginning teachers because one of them was so difficult that he had exhausted all his other mentor options:

The year I had three I got the third one because the beginning teacher was having difficulty getting along with anybody who was a mentor. So, I was asked by administration to please do it, because the mentor who was working with him couldn’t stand him anymore, and he was very difficult, and there was no one else who administration thought would cope with him.

Of the beginning teachers that participated in this study, one provides a valuable example of the role attitude and disposition played in the implementation of TEAM. Tim, a beginning teacher from Sunnydale, discussed how he waited until after football season to begin his work on TEAM, placing his involvement in extra-curricular coaching ahead of the required work to maintain his certification. He also explained that he did not attend any orientation meetings offered by the district because they conflicted with his coaching. Tim's mentor expressed frustration with his commitment and her attempts to work with him. She mentioned how the teacher she worked with previously was conscientious and reflective, whereas Tim was not. When asked if she believed the experience of TEAM would affect the practices of her beginning teacher she answered: "Yes for one, and no for the other." When asked why she thought there would be a difference, she answered "personality." In comparing the two she said "one [of the beginning teachers] is just more reflective than the other."

Unlike the other beginning teachers that participated in this study, Tim's attitude toward TEAM was blithe. He explained that he did not believe his experience with TEAM reinforced instructional practices or patterns of thought that he did naturally. He said that he would not likely continue any of the formal practices he did for TEAM after completing the requirement. Tim expressed his belief that he reflected on some levels naturally and informally and that his thoughts about his practice helped him improve:

But I do think that, you know, after talking it out a little bit, you probably do it naturally on a day to day basis. I would say you do that because you definitely go in with a plan, then you implement stuff, you do it, and then afterwards you think like, either that was good or that was bad. Like, I'm always like, I'll ride home with [my girlfriend] and say "man I killed it today, You should have seen me." You know, that kind of thing.

When asked if he believed that his experience with TEAM would have lasting effects on the way he thinks about teaching and learning, he responded:

I don't think it's changed any of my like philosophical big picture views on thinking or learning, or what makes a good teacher, or how to relate better to kids, or anything like that to be honest with you. I think it's just given me a few more tools that I might use.

Tim's example is instructive. It provides a glimpse into how the implementation of a policy or program can be affected by attitude. Although he did not express any resentment toward TEAM, he believed it was simple a "hoop to jump through" and he did not engage fully with the program. Tim's understanding of the purpose of TEAM and the process was the most unclear of the beginning teachers that were interviewed. As was described in a previous section, Tim believed the primary purpose of TEAM was a tool the state would use to assess and monitor beginning teachers. Tim demonstrates that even in cases where supports and information may be readily available, the individual may not choose to access those tools. In the case of Tim, the results of his disengagement from the program were misunderstanding and a limited influence on his practice.

Taken together, the factors discussed above demonstrate structural, cognitive, and affective elements that influence how local districts, mentors, and beginning teachers understand and engage with the TEAM program.

DISCUSSION AND IMPLICATIONS

This study sought to examine how local school districts implemented a new state teacher induction policy and identify the factors that affected their implementation. Interviews with state level officials helped construct a picture of the goals and intentions of the program from the perspective of the policy makers. Connecticut's Teacher Education and Mentoring (TEAM) program is designed to improve student achievement by influencing the instructional practices of beginning teachers. This study identified four primary themes undergirding the principles and design of the TEAM program from the state perspective. The first theme is the desire to improve

student achievement. The second theme focuses on the importance of teacher professional learning. The third theme is the centrality of mentorships. The fourth theme is decentralization of authority, shifting the locus of control for the implementation of TEAM from the state to the local districts. After identifying the four themes based on interviews with state level officials, I analyzed the responses of local implementers at the district and school level to seek points of alignment and departure between state level policy intentions and how local level understanding of those intentions. The findings of this study contribute to the literature on factors influencing policy implementation and the role of sense-making in policy implementation.

Structural factors influencing implementation

Among the factors influencing district implementation of TEAM were structural elements in the way each district chose to divide the responsibilities of oversight and supervision of the TEAM program. In each case, the District Facilitator served in more than one role within the school district however, the degree to which their role as DF was embedded within their primary role differed. Each served as an administrator with some degree of district-level responsibility, but in the cases of Donna and Scott, they also had additional building-level commitments. Both Donna and Scott reported being uninvolved with the oversight of TEAM apart from the minimum requirements of the DF position.

The degree to which each DF's roles were fragmented rather than embedded within their primary role affected the degree of oversight in each district. In Sunnydale, the least amount of oversight was reported with Donna, the DF, reporting feeling overwhelmed. She relied on building-based administrators to oversee implementation; however, as evidenced by the interview data collected from the mentor dyads, apart from building administrators signing off on the Professional Growth Action Plans (PGAPs) building leaders were not involved in overseeing

the mentor pairs. Additionally in Foreston, Scott self-reported a low level of engagement overseeing implementation efforts, due in part to his playing multiple roles within the district and in part to his personal belief that his level of involvement was appropriate. In contrast, Quaker Hill was overseen by the assistant superintendent. The participants in Quaker Hill reported direct involvement with their principal and assistant superintendent through periodic meetings. Examining the interview data from both dyads in Quaker Hill, as a whole their interviews indicated adherence to both procedural and substantive intentions behind TEAM. Although this study did not address in depth the issue, it may be questioned how oversight (or lack thereof) of TEAM implementation influenced implementation efforts at the local level.

A third structural element affecting implementation of TEAM was the availability of trained mentors. In two of the six dyads, the beginning teacher was matched with a mentor who was from a different content area. While both of these beginning teachers expressed appreciation for the assistance from their mentor, they also expressed feeling limited by their inability to discuss content-based problems of practice. Both of these beginning teachers expressed the desire to have a mentor in the same content area and expressed their belief that they would have gotten more out of the experience.

Cognitive and affective factors influencing TEAM: the role of sense-making

In looking at how closely aligned state intentions and local understandings were, it was clear that local implementers understood many of the key principles underlying the TEAM program. In particular, local implementers understood that the purpose of TEAM was to influence the professional learning of beginning teachers. They also understood that the primary structural component of the program was the mentor relationship. The goals of increasing student

achievement and shifting control from the state to local districts were understood to a certain degree but those understandings were less prominent in participant responses.

When looking at how the local districts implemented TEAM, it was evident that each district was complying with the program requirements but that variations occurred among districts as to how closely the mentors and beginning teachers adhered to the district TEAM action plan. One particular and notable local departure from state level intentions for TEAM related to the required number of hours for mentors and beginning teachers. In two cases, the mentors and beginning teachers from two dyads reported that they did not fulfill the contact hour requirement. This was not due to a lack of understanding of the requirement, but of conscious choices not to heed the guideline.

Several factors influenced district implementation of TEAM. One influence was the way in which program information was disseminated to implementers. In this case, the state used technology as the primary means of communicating with districts, mentors, and beginning teachers. Through the use of the TEAM program website, the state was able to deliver common messages and resources to those involved with TEAM at the local level. Additionally, the TEAM district facilitator was key for disseminating information within a district and for planning supports for beginning teachers and mentors; however, as discussed earlier, the extent to which DFs interacted with mentor pairs and oversaw the program was affected by their other roles within the district. Finally, cognitive and affective factors such as previous experience and attitude influenced how implementers viewed TEAM and how they chose to engage with the program.

The findings of this study support previous work on sense-making and factors influencing how implementers make sense of and act on policy messages. Although the findings of this study

do not reveal drastic subversion of the TEAM program, minor alterations in how mentors and beginning teachers implemented TEAM is in keeping with previous studies on how local policy implementers change programs and alter policies to meet their own needs (Berman, 1978; Hall & McGinty, 1997; Lipsky, 1980; Placier, Hall, McKendall, & Cockrell, 2000). In addition, this study provides descriptive examples of how local actors make sense of and act on policy messages. In particular, this study provides more specific examples of how cognitive and affective factors influence the sense-making and actions of implementers (Ali, 2006; Coburn, 2001, 2006; Spillane, 2004; Spillane, Reiser, & Reimer, 2002) such as the role of previous experience with similar policies and the attitude of individual participants in the program. how influential that learning is on their instructional practice.

Implications for policy implementation

Previous research on policy implementation has described multiple ways in which policies and programs can fail to achieve their desired goals. Among the reasons policies fail include lack of necessary resources, infrastructure, organizational or human resource capacity, or understanding of policy intent. (Berman, 1978; Lipsky, 1980; Placier, Hall, McKendall, & Cockrell, 2000; Spillane, Reiser, & Reimer, 2002; Timar, 1989). At times, policy implementers attempt to fulfill the requirements of a policy or program by adapting their approach to meet their local needs (Berman, 1978; Lipsky, 1980). This can sometimes lead to a transformation of intentions from what the policy creators envision to the policy as enacted carried out by local implementing agents (Hall & McGinty, 1997; Placier, Hall, McKendall, & Cockrell, 2000). This study adds to the body of implementation literature related to the ways in which local implementing agents use their available capacity and resources to fulfill the requirements of state policy.

Points of variability among the districts are consistent with previous literature citing local human resource and organizational limitations as factors influencing implementation (Berman, 1978; Lipsky, 1980). In particular, limitations related to the availability of trained mentors contributed to several cases where the beginning teacher was not paired with a mentor in her or his content area. Another point of variability in how the districts implemented TEAM lay in their district-level oversight of the program. In each of the three districts, the TEAM district facilitator was an administrator with multiple other roles. While the DF responsibility was seemingly more aligned with the day-to-day responsibilities of two of the DFs, a third was clearly overwhelmed by the number of tasks she was responsible for: working as a full-time building principal with no assistant, serving as DF, and multiple-other district level responsibilities imposed by the superintendent. By her own admission, the extent of her involvement with TEAM was reduced from what she would have liked.

In each of the participating districts, they adapted their implementation efforts to conform to their available resources. Even despite the differences among the participating districts, there were no glaring holes or disconnects between their implementation efforts and the intentions for the program as described by the state-level participants. To a certain extent, the policy as enacted by the local districts in this study and the policy as intended by the state-level program designers, appears aligned. This alignment may be explained, in part, by the strategies and technologies used by the CSDE to roll out its policy message to the districts—allowing them to make sense of and act on those messages.

Contributions to the field

In addition to providing support for earlier research, this study makes several new contributions both to researchers interested in policy implementation as well as to practitioners

interested in induction policy. First, this study identifies the role that technology can play as a tool for communicating policy intent. The message pathway, or means by which a policy message is communicated, can directly influence how a policy is understood. In this case, the role of the TEAM website, its content and structure, was important in the sense-making of local actors in understanding the procedures and intentions behind the program.

For practitioners, this study provides an initial look at implementation efforts related to TEAM. From a local school-district level, the experiences of the three districts participating in this study provide examples of structures and practices that both enhance and inhibit the TEAM experience for beginning teachers and their mentors. Districts seeking to adjust their own induction practices or anticipate potential obstacles to new programs may find the discussion useful, particularly as it relates to the structural factors influencing implementation. On a larger scale, state-level policy makers and planners seeking to develop or refine an induction model may find this study useful in attempting to anticipate challenges faced at the local level.

Connecticut's induction policy has been studied widely in the past and has served as a model for other state and city level induction programs (Peccheone, et al., 2005; Youngs, 2007, 2002). This study may be useful when comparing models and the factors influencing a decentralized program such as TEAM.

Limitations of the study

Several factors create limitations to this study. One major limiting factor relates to the study's design. By relying exclusively on interview data without direct observation of teacher behavior, the results may suffer from the biases inherent in self-reporting, namely a potential to under-report certain behaviors or to respond to questions in "socially desirable" ways (Donaldson & Grant-Villone, 2002, p. 247). Another factor relates to the selection of districts to

participate. By selecting districts in the middle of the DRGs, it was intended to avoid the discrepancies of implementation and inequities caused by comparing districts from different socio-economic statuses. By doing this however, the study ignores some factors that may influence implementation. As the TEAM program is highly decentralized, it is reasonable to assume, based on other research (Johnson, Kardos, Kauffman, Liu, & Donaldson, 2004; Kardos & Johnson, 2010) that implementation will be affected by socio-economic factors. Additional research could examine questions of equity and the relationship between socio-economic factors and implementation of TEAM.

A second factor that posed limitations to this study related to participant selection and the logistics of the interviews. At the state level, the participants all worked within the same office. They agreed to be interviewed only as a group in order, in the words of the program leader, to “most efficiently” use their time. Although my observations of the group dynamic seemed that they had a comfort level with each other and spoke openly, it might be questioned the degree to which the other program consultants felt they could speak freely in the presence of their supervisor. Additionally, the selection of the mentor dyads was based on convenience and availability. I was unable to be selective about which dyads to interview. While the available pool reflected the experiences of the beginning teachers who participated, a larger participant pool would likely have provided the ability to better compare across disciplines and schools.

A final factor limiting the study relates to the nature of qualitative research in general. As this study employs an interpretivist design, it describes the experiences of a limited number of participants. While the examples provided may illuminate ways in which the program is implemented in the participating districts, they are insufficient to draw broader conclusions about implementation across contexts, especially given the lack of variability in DRG status.

Suggestions for further research

Connecticut's Teacher Educator and Mentoring (TEAM) program is still in its early stages of implementation and the findings in this study are open to examination over time—especially as the state revises its practices and changes different elements of the program. It is reasonable to assume that the early stages of a program's implementation may be the most difficult for implementers as they seek to understand the intentions of policymakers and to accommodate program requirements within their existing structures and practices. There is ample room for additional studies and analyses of local implementation of TEAM as well as of its effects on student and teacher learning.

Areas for future research include attempts to study the effects of TEAM on student learning outcomes. The ultimate goal of TEAM is to increase student learning by increasing the professional knowledge and skills of beginning teachers. Quantitative measures of the relationship between TEAM participation and student outcomes may be difficult to construct as classroom-level assessments are difficult to standardize for comparison. Additionally, because all classroom teachers in Connecticut are required to participate in TEAM, there is no ready control group against which to compare student results. Standardized assessment data, such as student scores on the Connecticut Mastery Test (CMT) or the Connecticut Academic Performance Test (CAPT) may provide some student level data to compare what teachers focus on in their TEAM modules versus how their students perform on state tests.

Further qualitative studies focusing on how beginning teachers process and engage with the learning they identify in their Professional Growth Action Plans (PGAPs) can shed light on the depth and substance of new learning that TEAM encourages. A multiple case study analysis could track beginning teachers over the course of their experience with TEAM and through

multiple interviews as well as classroom observations and artifact analysis could provide a valuable portrait of how new teachers use TEAM as a learning tool, how much they learn, and how influential that learning is on their instructional practice.

A final suggestion for additional research would consider the equity issues surrounding implementation of TEAM across districts of different socio-economic status. Other studies have examined differential experiences for beginning teachers in urban high-poverty districts versus their counterparts in affluent suburban communities (Johnson, et. al., 2002; Kardos & Moore, 2010). Whereas TEAM is designed in part to improve student achievement through improving teacher professional learning and practice, it may be questioned whether or not the design and implementation of TEAM leads to increased performance across districts or if it reifies existing equity and achievement gaps.

APPENDIX A. STUDY PARTICIPANTS

Table 1. Study Participants*					
Level	Location/District	Name	Role	Dyad	Grade/Subject
State	CSDE	Connie	TEAM program consultant		
	CSDE	Julia	TEAM program consultant		
	CSDE	Dana	TEAM program consultant		
	CSDE	Bea	TEAM program consultant		
	CSDE	Lucia	TEAM program consultant		
	RESC	Faith	TEAM program contact		
	RESC	Liz	TEAM program contact		
District School	Sunnydale	Donna	Principal/District Facilitator		
	Sunnydale	Allison	Mentor	A	9-12, Social Studies
	Sunnydale	Jenn	Beginning Teacher	A	9-12, Social Studies
	Sunnydale	Rosette	Mentor	B	9-12, English
	Sunnydale	Tim	Beginning Teacher	B	9-12, English
District School	Foreston	Steve	Asst. Principal/District Facilitator		
	Foreston	Barbara	Mentor	C	7-12, Special Education
	Foreston	Anna	Beginning Teacher	C	7-12, Business
	Foreston	Maria	Mentor	D	7-12, Science
	Foreston	Monica	Beginning Teacher	D	7-12, English
District School	Quaker Hill	Ruben	Asst. Superintendent/District Facilitator		
	Quaker Hill	Louise	Mentor	E	7-8, English
	Quaker Hill	Cassie	Beginning Teacher	E	7-8, English
	Quaker Hill	Eva	Mentor	F	7-8, English
	Quaker Hill	Scott	Beginning Teacher	F	7-8, Tech Ed

*All names are pseudonyms

REFERENCES:

- Ali, S. (2006). Why does policy fail? Understanding the problems of policy implementation in Pakistan—a neuro-cognitive perspective. *International Studies in Educational Administration*, 34 (1), 2-20.
- Association for Supervision and Curriculum Development (2008). <http://www.ascd.org>.
- Atkinson, P. & Delamont, S. (1985). Socialisation into teaching: the research which lost its way. *British Journal of Sociology of Education*, 6(3), 307-322.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28(2), 117-148.
- Barnes, C. A. (2002). *Standards reform in high-poverty schools: Managing conflict and building capacity*. Teachers College Press.
- Basit, T.M. (2003). Manual or electronic? The role of coding in qualitative data analysis. *Educational Research*, 45 (2), 143–154.
- Baumgartner, F. R. & Jones, B. D. (1993). *Agendas and instability in American politics*. Chicago: University of Chicago Press.
- Bereiter, C. (1985). Towards a solution of the learning paradox. *Review of Educational Research*, 55(2), 201-226.
- Berman, P. (1978). Micro-implementation of social policy. The RAND Paper Series, Santa Monica California.
- Blanton, L. P., Sindelar, P. T., & Correa, V. I. (2006). Models and measures of beginning teacher quality. *Journal of Special Education*, 40(2), 115-127.
- Britton, E., Paine, L., Pimm, D., & Raizen, S. (2003). *Comprehensive teacher induction: Systems for early career learning*. Dordrecht, Netherlands and San Francisco: Kluwer Academic Publishers and WestEd.
- Brown, J. S., Collins, A., & Duguid, P. (1989a). Situated cognition and the culture of learning. *Educational Researcher*, 18 (1) , 32-42.
- Brown, J. S., Collins, A., & Duguid, P. (1989b). Debating the situation: A rejoinder to Palincsar and Wineburg. *Educational Researcher*, 18 (4), 10.
- Capitol Region Educational Center (2006). BEST mentor/Cooperating Teacher training—attended by the author.

- Capitol Region Educational Center (2009). TEAM training for school and district administrators—attended by the author.
- Carey, R.D. (1963). The “care and feeding” of new teachers. *Peabody Journal of Education*, 40(6), 353-357.
- Chin, E., & Asera, R. (2005). *Teacher Certification Policy: Multiple Treatment Interactions on the Body Politic*. Edited by Nina Bascia, Alister Cumming, Amanda Datnow, Kenneth Leithwood and David Livingstone. Springer International Handbooks of Education, pp. 473-490. Volume 13, International Handbook of Educational Policy. Springer, Netherlands.
- Coburn, C. E. (Summer, 2001). Collective sense-making about reading: How teachers mediate reading policy in their professional communities. *Educational Evaluation and Policy Analysis*, 23 (2), 145-170.
- Coburn, C. E. (Autumn, 2006). Framing the problem of reading instruction: Using frame analysis to uncover the micro-processes of policy implementation. *American Educational Research Journal*, 43 (3), 343-379.
- Cohen, D. K., Moffitt, S. L., & Goldin, S. (2007). Policy and practice: The dilemma. *American Journal of Education*, 113(4), 515-548.
- Connecticut State Department of Education (2010). Connecticut’s Common Core of Teaching.
- Connecticut Teacher Education and Mentoring Program (2012). <https://www.ctteam.org>.
- Darling-Hamond, L., Berry, B. T., Haselkorn, D., & Fideler, E. (1999). Teacher recruitment, selection, and induction: policy influences on the supply and quality of teachers. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession*, (pp. 183-232) San Francisco: Jossey Bass.
- Darling-Hammond, L.. & Sykes, G.. (2003, September 17). Wanted: A national teacher supply policy for education: The right way to meet the "Highly Qualified Teacher" challenge. *Education Policy Analysis Archives*, 11(33). Retrieved [November 19, 2004] from <http://epaa.asu.edu/epaa/v11n33/>.
- Desimone, L., Porter, A.C., Garet, M., Suk Yoon, K., & Birman, B. (2002). Effects of professional development on teachers’ instruction: Results from a three-year study. *Educational Evaluation and Policy Analysis*, 24(2), 81-112.
- Dewey, J. (1938). Experience and learning. New York: Kappa Delta Pi, MacMillan.
- Donaldson, S. I., & Grant-Villone, E. J. (2002). Understanding self-report bias in organizational behavior research. *Journal of Business and Psychology*, 17(2), 245-260.

- Driscoll, M.P. (2000). *Psychology of learning for instruction*. 2nd ed. Boston: Allyn and Bacon.
- Eaker, R., DuFour, R., & DuFour, R. (2002). *Getting started: restructuring schools to become professional learning communities*. Bloomington, IN: National Education Service.
- Eccles, J. S., & Wigfield, A. (2002). Motivation, beliefs, values, and goals. *Annual Review of Psychology*, 53, 109-132.
- Edelman, M. (1985). *The symbolic uses of politics*. University of Illinois Press.
- Edgar, D.E., & Warren, R.L. (1969). Power and autonomy in teacher socialization. *Sociology of Education*, 42(4), 386-399.
- Ehrich, L. C., Hansford, B., & Tennent, L. (2004). Formal mentoring programs in education and other professions: A review of the literature. *Educational Administration Quarterly*, 40(4), 518-540.
- Ellis, C. D. & Donaldson, M. L. (2010). Doers and delegators: Principal involvement in new teacher induction. A paper presented at the American Educational Research Association annual conference, Denver, CO: April 30 – May 4, 2010.
- Elmore, R. (1983). *Complexity and control: What legislators and administrators can do about implementing public policy*. In L. Shulman and G. Sykes. (Eds.) *Handbook of teaching Policy* (pp. 342-369). New York: Longman.
- Elmore, R., & Burney, D. (1998). *School variation and systemic instructional improvement in Community District #2, New York City*. Philadelphia: Consortium for Policy Research in Education, University of Pennsylvania.
- Elmore, R., & Burney, D. (1999). Investing in teacher learning: Staff development and instructional improvement. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession* (pp. 263-291). San Francisco: Jossey Bass.
- Feiman-Nemser, S. (2001a). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record*, 103, 1013-1055.
- Feiman-Nemser, S. (2001b). Helping novices learn to teach: Lessons from an Exemplary Support Teacher. *Journal of Teacher Education*, 52(1), 17-30.
- Feiman-Nemser, S. (2003). What new teachers need to learn. *Educational Leadership*, 60(8), 25-29.
- Feldman, D. C. (1976). A practical program for employee socialization. *Organizational Dynamics*, Autumn, 64-80.

- Fenstermacher, G.D., & Richardson, V. (2005). On making determinations of quality in teaching. *Teachers College Record*, 107(1), 186-213.
- Fenwick, T. J. (2000). Expanding conceptions of experiential learning: A review of the five contemporary perspectives on cognition. *Adult Education Quarterly*, 50(4), 243-272.
- Fenwick, T.J. (Spring, 2004). Teacher learning and professional growth plans: Implementation of a provincial policy. *Journal of Curriculum and Supervision*, 19(3), 259-282.
- Fletcher, S., Strong, M., & Villar, A. (2008). An investigation of the effects of variations in mentor-based induction on the performance of students in California. *Teachers College Record*, 110(10), 2271-2289.
- Flores, M.A. (2001). Person and context in becoming a new teacher. *Journal of Education for Teaching*, 27(2), 135-148.
- Fossey, E., Harvey, C., McDermott, F., & Davidson, L. (2002). Understanding and evaluating qualitative research. *Australian and New Zealand Journal of Psychiatry*, 36, 717-723.
- Garet, M., Porter, A., Desimone, L., Birman, B., & Yoon, K. (2001). What makes professional development effective? Analysis of a national sample of teachers. *American Education Research Journal*, 38(3), 915-945.
- Gilbert, L. (2005). What helps beginning teachers? *Educational Leadership*, 62(8), 36-39.
- Grossman, P., & Thompson C. (2004). District policy and beginning teachers: A lens on teacher learning. *Educational Evaluation and Policy Analysis*, 26(4), 281-301.
- Guin, K. (2004). Chronic teacher turnover in urban elementary schools. *Education Policy Analysis Archives*, 12(42). Retrieved [November 19, 2004] from <http://epaa.asu.edu/epaa/v12n42/>.
- Haas, E., Wilson, G., Cobb, C., & Rallis, S. (2005). One hundred percent proficiency: A mission impossible. *Equity and Excellence in Education*, 38, 180-189.
- Hall, P. M., & McGinty, P. J. W. (1997). Policy as the transformation of intentions. *The Sociological Quarterly*, 38(3), 439-467.
- Ingersoll, R. M. (1997). Teacher turnover and teacher quality: the recurring myth of teacher shortages. *Teachers College Record*, 41-44.
- Ingersoll, R. M. (2001). Teacher turnover and teacher shortages: an organizational analysis. *American Educational Research Journal*, 38(3), 499-534.
- Ingersoll, R. (2006). *Who controls teachers' work? Power and accountability in American schools*. Boston: Harvard University Press.

- Johnson, S. M., & Kardos, S. M. (2002). Keeping new teachers in mind. *Educational Leadership*, 59(6), 12-16.
- Johnson, S. M., Kardos, S. M., Kauffman, D., Liu, E. & Donaldson, M. L. (2004, October 29). The support gap: New teachers' early experiences in high-income and low-income schools. *Education Policy Analysis Archives*, 12(61). Retrieved [12/9/04]from <http://epaa.asu.edu/epaa/v12n61/>.
- Johnson, S. M. & Birkeland, S. E. (2003a). Pursuing a sense of success: new teachers explain their career decisions. *American Educational Research Journal*, 40(3), 581-617.
- Johnson, S. M. & Birkeland, S. E. (2003b). The schools that teachers choose. *Educational Leadership*, 60(8), 20-24.
- Johnson, S. M. (2004). *Finders and keepers: Helping new teachers survive and thrive in our schools*. San Francisco, CA: Jossey-Bass.
- Johnston, B., Wetherill, K., & Greenbaum, H. (2002). Teacher socialization: opportunities for University-school partnerships to improve professional cultures. *High School Journal*, 23-39.
- Julius, A.K. (1976). Britain's new induction plan for first year teachers. *The Elementary School Journal*, 76(6), 350-357.
- Kardos, S. M., & Moore, S. M. (2010). New teachers' experiences of mentoring: the good, the bad, and the inequity. *Journal of Educational Change*, 11:23-44.
- Kauffman, D., Johnson, S.M., Kardos, S.M., Liu, E., & Peske, H.G. (2002). Lost at sea: new teachers' experiences with curriculum and assessment. *Teachers College Record*, 104(2), 273-300.
- Kennedy, M. (2005). *Inside Teaching. How Classroom Life Undermines Reform*. Cambridge: Harvard University Press.
- Kerr, D. (1976). *Educational Policy: Analysis, Structure, and Justification*. New York: John Wiley.
- Kingdon, J. R. (1995). *Agendas, Alternatives, and Public Policies* (2nd edition). Addison-Wesley Educational Publishers, Inc.
- Kolb, D. (1984). *Experiential learning: Experience as the source of learning and development*. New Jersey: Prentice Hall.
- Lave, J., & Wenger, E. (1991). *Situated Learning - legitimate peripheral participation*. Cambridge: Cambridge University Press.

- Legislative Program Review and Investigations Committee (December 2007). *Beginning Educator and Support Program*. Connecticut General Assembly: Hartford, CT.
- Lipsky, M. (1980). *Street level bureaucracy*. New York: Basic Books.
- Long, J. (1997). The dark side of mentoring. *Australian Educational Researcher*, 24 (2), 115-133.
- Lortie, D.C. (1969). The balance of control and autonomy in elementary school teaching. In *The semi-professions and their organization*, ed. A. Etzioni, 1-53.
- Lortie, D. C. (1975). *Schoolteacher*. Chicago: University of Chicago Press.
- Lowi, T. (1969). *The end of liberalism*. New York: Norton.
- Luft, J., Roehrig, G., & Patterson, N. (2003). Contrasting landscapes: A comparison of the impact of different induction programs on beginning secondary science teachers' practices, beliefs, and experiences. *Journal of Research in Science Teaching*, 40(1), 77-97.
- Majone, G. & Wildavsky, A. (1978). Implementation as evolution, in *The Policy Studies Review Annual: 1978*, (Howard Freeman, ed.). Beverly Hills: Sage.
- McCann, T. M. , Johannesen, L. R., & Ricca, B. (2005). Responding to new teacher's concerns. *Educational Leadership*, 30-34.
- McDonnell, L., & Elmore, R. (1986). Getting the job done: Alternative policy instruments. *Educational Evaluation and Policy Analysis*, 9(2), 133-152.
- McDonnell, L. (2004). Persuasion as policy instrument. Chapter 2, *Politics, Persuasion, and Educational Testing*. Cambridge: Harvard University Press.
- McGinnis, J. R., Parker, C., & Graebor, A. O. (2004). A cultural perspective of the induction of five reform-minded beginning mathematics and science teachers. *Journal of Research in Science Teaching*, 41(7), 720-747.
- McLaren, P. (1998). *Life in schools*. (3rd ed.) New York: Longman.
- Moss, P. A., Sutherland, L. M., Haniford, L., Miller, R., Johnson, D., Geist, P. K., et al. (2004). Interrogating the generalizability of portfolio assessments of beginning teachers: A qualitative study. *Education Policy Analysis Archives*, 12(32), 1-70.

- Murphy, P., DeArmond, M., & Guin, K. (2003). A national crisis or localized problems? getting perspective on the scope and scale of the teacher shortage. *Education Policy Analysis Archives*, 11(23). Retrieved [November 19, 2004] from <http://epaa.asu.edu/epaa/v11n23/>.
- National Center for Education Statistics (2008). Table 1.15. Requirements for participation in state-funded induction programs and mentoring programs for beginning teachers. http://nces.ed.gov/programs/statereform/saa_tab15.asp [accessed on July 18, 2008].
- O'Sullivan, D. (1980). Teacher socialisation and teacher style in an Irish cultural context. *European Journal of Education*, 15(4), 387-397.
- Packer, M., & Goicoechea, J. (2000). Sociocultural and constructivist theories of learning: Ontology, not just epistemology. *Educational Psychologist*, 35(4), 227-241.
- Palincsar, A. S. (1989). Less charted waters. *Educational Researcher*, 18 (4), 5-7.
- Pecheone, R. L., Pigg, M. J., Chung, R. R., & Souviney, R. J. (March/April 2005). Performance assessment and electronic portfolios: their effect on teacher learning and education. *Clearing House*, 78(4), 164-176.
- Phillips, D. C. (1995). The good, the bad, and the ugly: The many faces of constructivism. *Educational Researcher*, 24(7), 5-12.
- Placier, M., Hall, P. M., McKendall, S. B., & Cockrell, K. S. (2000). Policy as the transformation of intentions: making multicultural education policy. *Education Policy*, 14(2), 259-289.
- Reed, D, Reuben, K. S., & Barbour, E. (2006). Retention of new teachers in California. San Francisco, CA: Public Policy Institute of California.
- Roth, W.-M., & Lee, Y.-J. (2007). "Vygotsky's neglected legacy": Cultural-historical activity theory. *Review of Educational Research*, 77(2), 186-232.
- Sabar, N. (2004). From heaven to reality through crisis: novice teachers as migrants. *Teaching and Teacher Education*, 20, 145-161.
- Sanders, W. L., & Horn, S. P. (1998). Research findings from the Tennessee Value-Added Assessment System (TVAAS) database: Implications for educational evaluation research. *Journal of Personnel Evaluation in Education*, 12(3), 247-256.
- Schlechy, P. C., & Whitford, B. L. (1989). Systemic perspectives on beginning teacher programs. *Elementary School Journal*, 89(4), 440-449.
- Schon, D. (1983). The reflective practitioner. New York: Basic Books.

- Sheckley, B. G., & Keeton, M. T. (1997a) Service learning: A theoretical model, *Service Learning, Ninety-sixth Yearbook of the National Society for the Study of Education*, 32- 55.
- Sheckley, B. G., & Keeton, M. T. (1997b). Improving employees development: Perspectives from research and practice. Chicago: Council for Adult and Experiential Learning.
- Sheckley, B. G., & Keeton, M. T. (1997c). A review of the research on learning: Implications for the instruction of adult learners. A paper presented to the AAHE planning meeting, Denver, Colorado, May 7-8, 1997.
- Sfard, A. (1998). On two metaphors for learning and on the danger of choosing just one. *Educational Researcher*, 27(2), 4-13.
- Shore, L.M., & Wayne, S.J. (1993). Commitment and employee behavior: comparison of affective commitment and continuance commitment with perceived organizational support. *Journal of Applied Psychology*. 78(3), 774-780.
- Shulman, L. S. & Shulman, J. H. (2004). How and what teachers learn: A shifting perspective. *Journal of Curriculum Studies*, 36(2), 257-271.
- Smith, T. M., & Ingersoll, R. M. (2004). What are the effects of induction and mentoring on beginning teacher turnover? *American Educational Research Journal*, 41(3), 681-714.
- Speier, C., & Frese, M. (1997). Generalized self-efficacy as a mediator and moderator between control and complexity at work and personal initiative: A longitudinal field study in East Germany. *Human Performance*, 10(2), 171-192.
- Spillane, J. (2004). *Standards Deviation. How Schools Misunderstand Education Policy*. Cambridge: Harvard University Press.
- Stroble, E., & Cooper, J.M. (1988) Mentor teachers: coaches or referees? *Theory Into Practice*, 27(3), 231-236.
- Strong, M. (2005). Teacher induction, mentoring, and retention: A summary of the research. *The New Educator*, 1, 181-198.
- Su, J. Z. X. (1992). Sources of influence in preservice teacher socialization. *Journal of Education for Teaching*, 18(3), 239-258.
- Tate, M. W. (1943). The induction of secondary-school teachers. *The School Review*, 51(3), 150-157.
- Timar, T. B. (1989). The politics of school restructuring. *Politics of Education Association Yearbook*, 4(5), 55-74.

- Truman, D. (1951/1993). *The governmental process*. (2nd ed.). Berkley, CA: Institute of Government Studies.
- Tyack, D., & Cuban, L. (1995). *Tinkering toward utopia: A century of public school reform*. Cambridge, MA: Harvard University Press.
- United States Department of Education. (1995). <http://nces.ed.gov/pubs95/web/95770.asp>.
- Villar, A., & Strong, M. (Summer 2007). Is Mentoring Worth the Money? A Benefit-Cost Analysis and Five-year Rate of Return of a Comprehensive Mentoring Program for Beginning Teachers. *ERS Spectrum: Journal of Research and Information*. 25(3): 1-17, Educational Research Service.
- Vygotsky, L. (1930/1978). *Mind and society*. Cambridge, MA: Harvard University Press.
- Wang, J, Odell, S. J., & Schwille, S. A. (2008). Effects of teacher induction on beginning teachers' teaching: A critical review of the literature. *Journal of Teacher Education*, 59(2), 132-152.
- Weiss, C. (1995). The four I's of school reform: How interest, ideology, information, and institutions affect teachers and principals. *Harvard Educational Review*, 65(4), 571-592.
- Wilson, J. Q. (1989). *Bureaucracy*. Basic Books (AZ).
- Wilson, S. M., Darling-Hammond, L., & Berry, B. (February 2001). A case of successful teaching policy: Connecticut's long-term efforts to improve teaching and learning. Center for the Study of Teaching and Policy, University of Washington, Document R-01-2.
- Wilson, S. M., & Floden, R. E. (2003). *Creating effective teachers: concise answers for hard questions*. Washington. D.C.: AACTE Publications.
- Wilson, S. M., & Berne, J. (1999). Teacher learning and the acquisition of professional knowledge: An examination of research on contemporary professional development. *Review of Research in Education*, 24, 173-209.
- Windschitl, M. (2002). Framing constructivism in practice as negotiation of dilemmas: An analysis of the conceptual, pedagogical, cultural, and political challenges facing teachers. *Review of Educational Research*, 72(2), 131-175.
- Wineburg, S. S. (1989). Remembrance of theories past. *Educational Researcher*, 18 (4), 7-10.
- Wong, H. K. (2004). Induction programs that keep new teachers teaching and improving. *NASSP Bulletin*, 88 (41), 41-58.
- Yin, R. K. (2008). *Case study research: Design and methods* (Vol. 5). SAGE Publications, Incorporated.

Youngs, P. (November, 2002). State and district policy related to mentoring and new teacher induction in Connecticut. A paper prepared for the National Commission on Teaching and America's Future.

Youngs, P. (2007). District induction policy and new teachers' experiences: An examination of local policy implementation in Connecticut. *Teachers College Record*. 109 (4), 797-837.

Yusko, B., & Feiman-Nemser, S. (2006). Embracing contraries: Assistance and assessment in new teacher induction. *Teachers College Record*, 110(5), 923-953.

Learning is a TEAM Effort: The Role of Connecticut's New State Induction Policy in the
Professional Learning of Beginning Teachers

By

Chad D. Ellis

A dissertation article submitted in partial fulfillment of
The requirements for the degree of

Doctor of Philosophy
(Educational Policy Analysis)

At the

UNIVERSITY OF CONNECTICUT
2012

Second of three

ABSTRACT

This study was one of three studies focused on Connecticut's new state induction program, the Teacher Education and Mentoring (TEAM) program. This portion of the study focused on the role TEAM played in fostering the professional learning of beginning teachers. Using interview data collected from six dyads of beginning teachers and their mentors, the study examined teacher perceptions of their professional learning under TEAM, their perceptions of the lasting effects of their new learning on their instruction, and factors that influenced the learning of the beginning teachers. The findings revealed that the beginning teachers and mentors believed that their experience under TEAM contributed to their professional learning although most struggled to articulate specific details about what and how they learned. Additionally, most participants stated that they believed their experience with TEAM will lead to lasting changes to their practice primarily through the learning of new instructional strategies, changed habits of mind, or renewed understanding of the role of reflection in improving practice. Three primary factors were identified as influences on the learning experience of participants: the perceived safety of risk and experimentation under TEAM, the pairing of subject specific mentors versus general mentors, and the role of individual motivation and attitude and teacher engagement with the program. The article concludes with implications for practice and suggestions for programs targeting the induction stage as a leverage point for teacher professional learning.

INTRODUCTION

Over the past fifteen years, a great deal of research, as well as political and media attention, has been paid to the topic of teacher quality. In the wake of No Child Left Behind, the need to demonstrate that teachers were “highly qualified” in the subjects that they taught led to increased attention not only on teacher credentials but on teacher effectiveness. Multiple studies have concluded that the most significant factor influencing student learning was the quality and capacity of the classroom teacher (Darling-Hammond, 2000; Darling-Hammond & Bransford, 2005; Goe & Stickler, 2008; National Commission on Teaching and America’s Future, 1996; National Council for Teacher Quality, 2004; Rice, 2003). As a result, policy makers at the federal, state, and local levels, as well as researchers and practitioners, have sought ways to improve the quality of teaching to ensure that every classroom is staffed with a highly qualified and *highly effective* teacher.

At the center of all reform efforts is the goal of increasing student achievement. Efforts at reform generally focus on one or more components of what City et al. (2009) refer to as the instructional core. The instructional core is a tripartite model that posits student outcomes result as part of an interplay among instructional *content*, *student* level variables, and *teacher* level variables. Reforms aimed at content seek to ensure high quality, intellectually rich, and rigorous learning experiences for students. Student level variables include factors such as student motivation and level of engagement with content. Teacher level variables include teachers’ knowledge, skills, and capacity to engage students with rich, meaningful learning experiences. One of the main principles related to the instructional core is that any change to one of the three parts of the core must also include change to the other two (City et al., 2009). Efforts to intervene in one core area often come with a set of assumptions or a theory of action about how the other

two will be affected. Connecticut's new teacher induction program, Teacher Education and Mentoring (TEAM), is one example of a program seeking to influence teacher level variables in an effort to leverage content and student level variables.

The state of Connecticut has a documented history of reform policy tracing back to the mid-1980s (LPRIC, 2007; Wilson, Darling-Hammond, & Berry, 2001). Although not explicitly referencing the instructional core (City et al., 2009), the principles behind the core are evident in Connecticut's efforts to reform teaching and learning. Beginning with the Educational Enhancement Act in 1986 (PA 86-1) the state began tying teacher certification to stricter standards of preparation and qualification. Other changes occurred in how teachers were evaluated with guidelines being developed by the state in the late 1980s and revised in the late 1990s. Among its latest efforts at reform is a new induction program focused on teacher-level improvements that is structured in a way to also affect student and content level variables (Ellis, 2012a, 2012b).

Between 2008 and 2009, the Connecticut State Department of Education (CSDE) developed a new teacher induction program to replace the former which, after legislative review, was eliminated in 2007 (CSDE, 2012; LPRIC, 2007). The new Teacher Education and Mentoring (TEAM) program replaced Connecticut's Beginning Educator Support and Training (BEST) program; the BEST program had been in place since the 1990s. The TEAM program is a marked departure from the BEST, which served primarily as an assessment of teacher competency based on Connecticut's Common Core of Teaching (CTTEAM.ORG, 2012; LPRIC, 2007). Ostensibly, the purpose of the TEAM program is to increase student achievement across the state by engaging beginning teachers in a program of professional learning and reflection on content and instructional practice. The theory of action underlying the program is that by

leveraging teacher professional learning, instructional practice will improve and with it student achievement (Ellis, 2012a; 2012b).

Features of the TEAM program

Perhaps the defining feature of TEAM is the requirement that all beginning teachers are paired with a mentor (CTTEAM.ORG, 2012). The mentor's role under TEAM is to provide guidance, coaching, and a sounding board for the ideas of beginning teachers. Every beginning teacher is required to engage in five learning "modules" which are tied to Connecticut's revised Common Core of Teaching (CCT). The modules require beginning teachers and their mentors to identify a problem of practice and area of growth in each area corresponding to the CCT: classroom environment, planning, instruction, assessment, and professional responsibilities and ethics. After identifying a problem of practice in each of the module areas, the beginning teacher and mentor must co-develop a Professional Growth Action Plan (PGAP), which outlines what new learning the beginning teacher and mentor will pursue, what resources they will need, and a timeline for implementing the plan. At the end of the PGAP implementation cycle (approximately eight weeks) the beginning teacher must write a reflection paper that identifies what new learning he or she experienced, how that learning influenced practice, and what student outcomes resulted from implementation of the PGAP (CTTEAM.ORG, 2012). These papers are submitted to either in-district or regional review. The beginning teacher receives feedback on her/his paper and either "passes" or must resubmit the paper with revisions.

The TEAM program has been described as a process for professional learning and development (Ellis, 2012a, 2012b). At the core of this process is the interaction between beginning teachers and their mentors. Although there have been numerous studies and practitioner articles on mentorships, few have examined the mentoring relationship with an eye

toward professional learning (Long, 1997; Wang, Odell, & Schwille, 2008). This study sought to provide an initial look at the influence of mentorships on the professional learning of beginning teachers by examining teacher perceptions of the role of TEAM in their professional learning and practice.

CONCEPTUAL FRAMEWORK

This study drew primarily upon literature related to induction policies, programs, and how those influence beginning teachers and students, mentorships, and teacher professional learning. I begin with a general overview of the role state and local induction policy and programs can play in the experiences and performance of beginning teachers and their students. I then provide a general overview and discussion of the literature on mentorships, and conclude with an overview of applicable literature related to teacher professional learning.

Induction policy and the influence of induction programs on teachers and students

Several large-scale induction programs have been developed and studied effects on teacher retention, teacher effectiveness, and student achievement. Among the programs are California's Beginning Teacher Support and Assessment (BTSA) program and the city of Chicago's Teacher Advancement Program (TAP). As part of the BTSA, new teachers participate in the California Formative Assessment and Support System for Teachers (CFASST). Under this program, teachers are assigned a trained mentor who helps guide them through a process of goal setting, learning, and reflection. Under Chicago's TAP, teachers were able to earn additional pay by serving as mentors or master teachers and by demonstrating their "value added" to student achievement based on student scores and classroom observations.

Program evaluations conducted on CFASST and TAP indicated the potential for these programs to affect teacher practice. Thompson's et al. (2004) evaluation of CFASST focused on the influence of teacher involvement on the program in key areas of teacher practice including: learning environment, facilitation of learning, quality of learning goals, and representation of content. The researchers compared measures of teacher performance in those areas after sorting participants into groups based on high, moderate, or low levels of engagement with CFASST. The participation levels were calculated by the researchers based on participant responses on a CFASST engagement survey. Thompson's research team concluded that despite not meeting the standard levels of statistical significance, there was support for concluding that intensive engagement with CFASST was associated with changes in teacher practice. In citing some of the limitations of the study, the researchers noted how the small sample size (n=27) and their inability to follow a truly experimental design likely affected the significance levels and internal validity associated with their findings.

Where Thompson et al. (2004) focused on teacher level effects, Glazerman and Seifullah's (2012) evaluation of TAP focused on the link between how the program was implemented and the effects on student outcomes and teacher retention. Their evaluation examined Chicago's experience implementing TAP over four years. Comparing schools participating in TAP with those not participating, the researchers concluded that while there were observable changes to what happened inside TAP schools, the results linking participation in TAP to student achievement were mixed with no discernible differences among schools. They did conclude, however, that TAP had positive effects on retention rates, as there was a 12% greater return rate for teachers in TAP schools versus non-TAP schools. Despite these findings, the authors noted that the National Institute for Excellence in Teaching, the organization that

oversees implementation of TAP programs nationally, had concluded that implementation of TAP in the participating schools was not rigorous.

In addition to CFASST and TAP, Glazerman et al. (2006; 2010) studied the effects of intensive induction programs on teacher practice and student performance. Using supports provided by either the New Teacher Center (NTC) at the University of Santa Cruz, or Educational Testing Services (ETS) in Princeton, New Jersey, participating districts were assigned to either one or two year induction programs. Both the NTC and ETS programs involved intensive support for beginning teachers provided by a screened and trained mentor. The study involved 1009 teachers in 48 schools across 13 states. The researchers randomly assigned new teachers to treatment or control groups and then compared teacher reports of the amount of mentoring they received, to changes in classroom practice, student achievement outcomes, and teacher retention rates. What they found was that despite reporting having received more mentoring than the control group, teachers involved in the high intensity induction program did not influence classroom practice in the first year, student achievement in the first two years, or retention rates. The researchers did conclude however that after three years there were statistically significant differences in student achievement between the students of teachers that participated in the intensive mentoring program and the students of teachers that did not have intensive induction. They found that the students of teachers that participated in the intensive mentoring program had higher achievement scores than those participating in the less intensive mentoring.

What is interesting about these studies is that despite an absence of conclusive evidence, there are kernels of evidence in support of the potential for programs to achieve the policy goals of providing effective induction supports for beginning teachers. The seeming contradictions in

conclusions between the Thompson et al. (2004) and Glazerman et al. (2012) studies regarding the influence of intensive induction on teaching practice may be explained in part by their use of different instruments to measure teaching practice. All of the evaluations indicate that the intensive induction programs influenced and led to changes at the school and teacher levels, but it remains unclear what kinds of changes actually occurred and what effect (if any) those changes had on student outcomes.

Mentorships

A major component of most induction programs and the primary structure of the TEAM program is the use of mentorships. Much of the literature on mentorships focuses on descriptions of mentoring models, suggestions for structuring mentoring programs, and studies that measure beginning teacher and mentor satisfaction with the mentoring experience. Few articles or studies have focused on mentoring for professional learning or the role of mentoring on student achievement. Many of the studies that discuss mentoring do so within the context of larger induction experiences and focus on the effects of mentoring on teacher retention rates (Ingersoll, 1999; 2001; Ingersoll & Strong, 2011; Smith & Ingersoll, 2004). These studies, for the most part, have concluded that beginning teachers who experience some form of mentorship are less likely to leave teaching than those that do not have mentors.

Other studies focus on various structural elements of mentorships such as the role of general versus subject specific mentors (Soares & Lock, 2007), the involvement of university-district partnerships (Davis & Higdon, 2008; Grove, Strudler, & Odell, 2004) and the use of technology as a tool for mentoring (Dempsey, Arthur-Kelly & Carty, 2009). These studies provide valuable insights into various elements of mentorships. Soares and Lock (2007) found that beginning teachers who are paired with mentors certified in the same subject area are able to

have deeper content-based discussions whereas those paired with out-of-subject mentors are limited to general pedagogical discussions. Grove, Strudler, and Odell (2004) and Davis and Higdon (2008) both demonstrated the role that university-district partnerships can play as positive influences on the mentor experiences of beginning teachers—affecting both teacher satisfaction with their support, as well as the types of instructional activities they do in their classrooms. Dempsey, Arthur-Kelly, and Carty (2009) provide valuable suggestions for the potential of on-line mentoring, providing access to other resources and networks in addition to what is available locally.

Beyond examining the structural elements of mentoring, several studies focused on the role of mentoring in shaping the instructional practices of beginning teachers. Feiman-Nemser (2001a) provided an important study highlighting the role that a highly skilled mentor had on developing proficiency in beginning teachers. She examined one case of a mentor that she described as exemplary. Through ten hours of interviews and twenty hours of observation, she described the way in which the mentor worked with beginning teachers. In seeking to demonstrate the qualities of an educative mentorship as opposed to one that is designed to ease entry into the occupation, she identified several important elements of practice. Exemplary mentors, according to Feiman-Nemser, were successful at finding openings for “fruitful topics that are salient to the novice” (p. 21). Additionally, exemplary mentors were able to pinpoint problems, probe novice thinking, notice and acknowledge specific growth in the novice, and focus discussion on kids. Exemplary mentors understand and reinforce theory in their discussions, provide “living examples,” and “model wondering” about teaching. Through these characteristics, Feiman-Nemser argued, mentorships could move beyond the emotional and

logistical support characteristic of many mentorships toward models where novices develop and learn in practice.

Additional studies extended this line of thought, focusing on the role and extent to which mentorships influenced novice practice. Davis and Higdon (2008) compared two small groups of first year elementary school teachers: one group of five assigned to a university-based mentoring program, and a group of five only provided induction and mentoring supports by their districts. Despite the small sample size, the researchers analyzed quantitative and qualitative data, concluding that the beginning teachers involved with the university mentoring program were more likely to have frequent mentoring and to demonstrate increased instructional capacity than their non-program counterparts. Evertson and Smithey (2000) compared the performance of beginning teachers who worked with trained mentors versus those whose mentors received no formal training. They concluded that beginning teachers of trained mentors performed better in classroom management, organization, behavior, and engagement. Although the study did use random assignment, it only measured indicators of classroom environment and student behavior, as well as, procedural elements of instruction and did not measure potential effects on student achievement. Stanulis and Floden's (2009) study of twenty-four beginning teachers compared one group of twelve involved with an intensive mentorship program with 12 that were not. Using score ratings based on a common observational protocol, as well as qualitative data from participant responses to survey questions, the researchers concluded that the participants in the intensive mentorship program performed better after eight months than their counterparts. Although the study compared a treatment and control group, the small sample sizes for each group ($n=12$ per group) make conclusions about significant differences and causality dubious, particularly in the absence of inferential statistical tests and random assignment.

Collectively, the studies of mentorships provide some evidence that the teaching practices of new teachers are influenced by their mentors. Due to the limitations of most of these studies, such as small sample size and/or the inability to randomly assign participants to treatment or comparison groups, quantitative assessments of the influence of mentorship may be met with skepticism. The qualitative data, however, lend additional support and illustration of how mentors may influence the practice of beginning teachers. Most of the studies of mentorship do not consider the potential relationship between teacher mentorship and student achievement outcomes.

The few studies that do focus on the role of mentoring on student achievement have generally concluded that achievement increases for the students of teachers participating in a mentor program; however, these studies have largely over-extended themselves, drawing conclusions that cannot be supported based on the study design or the data analyzed. For example, Fletcher, Strong, and Villar (2008) linked mentorships and student achievement concluding that teacher participation in mentoring programs leads to increased student achievement. The researchers used a simple regression analysis that accounted for prior student achievement, as well as factors related to student race and economic status. The study did not compare the achievement of students whose teachers participated in mentorship versus those that did not, nor did their regression model account for mentoring. Instead, the researchers categorized the three districts by “intensity” of mentorship—namely how many contact hours mentors had and whether or not districts provided full release time for mentors to work with beginning teachers. Even with this sorting, the researchers found that previous achievement was the best predictor of student (future) achievement; still, they stretched their conclusion to assert that mentorships influence student achievement.

In a recent critical review of the literature, Ingersoll and Strong (2011) reviewed fifteen empirical studies related to the achievement effects of induction on beginning teachers. They acknowledged the difficulty of drawing a causal link between teacher participation in induction activities and student achievement outcomes. Although focusing on studies of induction programs generally rather than mentorships specifically, the authors' review provided an important commentary on the breadth and depth of existing studies. They observed that few empirical studies have been able to establish truly scientific designs with random assignment to control groups, many suffered from small sample size, and none were able to control for intra-district variations in the quality of induction from school to school.

Although recent studies provide conflicting evidence as to the effects of mentoring on beginning practice, several researchers conclude that beginning teachers benefit from being paired and meeting regularly with a trained mentor (Fletcher, Strong, & Villa, 2008; Ingersoll, 1997; 2001; Smith & Ingersoll, 2004). These studies however have focused more on teacher attrition rates and not on the link between mentorship and professional learning.

Teacher Learning and Professional Development

Any concept of teacher professional learning is often based on a conceptual understanding of what teachers need to learn, the contexts in which they learn, and the factors influencing their learning. Much of contemporary thinking related to teacher learning has been influenced by the work of Shulman (1987), Ball and Cohen (1999), and Feiman-Nemser (2001b). Shulman (1987) provided an important contribution to the intellectual climate regarding teaching reform. He argued that before reforms aimed at professionalizing teaching could take place, it was essential to identify a core set of knowledge and skills needed by teachers. He provided an initial list of competencies which included: content knowledge,

general and subject specific pedagogical knowledge, curriculum knowledge, knowledge of learners and their characteristics, knowledge of educational contexts, and knowledge of the philosophical and historical underpinnings of education. In addition to this knowledge base, Shulman identified the role of reflection on practice as a core skill for teachers to process and develop their own learning.

Extending Shulman's introductory list of essential knowledge, Feiman-Nemser (2001b) suggested that the learning needs of beginning teachers changes over time and she suggested a continuum of professional learning needs of teachers from pre-service through professional development for experienced teachers. During the induction stage, Feiman-Nemser suggested that beginning teachers needed to learn and develop in six areas: (1) gaining local knowledge of students, curriculum, and school context, (2) designing responsive curriculum and instruction, (3) enacting a beginning repertoire of strategies, (4) creating a classroom learning community, (5) developing a professional identity, and (6) learning in and from practice. Taken together, Shulman (1987) and Feiman-Nemser (2001b) provide a solid foundation for the "what" teachers need to know.

Another key variable in understanding the ways in which teachers learn is the context and process in which they engage with learning—the "how" of teacher learning. By virtue of age, previous schooling, and place in the workforce, teachers fall under the category of adult learners. What differentiates adult learners from traditional learners (such as schoolchildren) is primarily the context and location in which learning takes place (Merriam, Caffarella & Baumgartner, 2007). Traditional learners have formal education through classes and have a structured schedule (such as a school day or class schedule), whereas adult learning is often grounded in the workplace (Boud & Garrick, 1999; Goldstein & Ford, 2002; Holton & Baldwin, 2003). Adult

learning may be largely informal and may take place piecemeal in brief training sessions rather than in longer formalized class settings (Merriam, Cafarella & Baumgartner, 2007).

Traditional avenues for teacher learning include professional development sessions (PD) provided by schools, as well as formal coursework at colleges and universities. The failure of many professional development programs has been documented (Ball & Cohen, 1999; Darling-Hammond, 1998) due to the frequent disconnection from direct classroom practice or the absence of follow through on topics covered in PD workshops. Beyond PD and college coursework, teachers acquire knowledge in other settings and contexts, both formal and informal. Shulman (1987) identified four sources of teachers' knowledge base: "(1) scholarship in content disciplines, (2) the materials and settings of the institutionalized educational process, (3) research on schooling, social organizations, human learning, teaching and development, and other social and cultural phenomena that affect what teachers can do, and (4) the wisdom of practice itself" (p. 8).

Ball and Cohen (1999) extended the concept of the way and context within which teachers learn. They argued that traditional professional development models had largely failed and that such programs needed to be replaced by new models grounded in classroom activities and involving collaborative inquiry, problem solving, and reflection. Although there is no doubt that learning occurs within the individual and through collective learning, an influential model of professional development and teacher learning over the past ten years has focused on collaborative learning. Many of the articles and studies surrounding teacher learning advocate for collaborative learning arrangements; in particular communities of practice, or professional learning communities (Eaker, DuFour & DuFour, 2002; Lieberman & Mace, 2010; McLaughlin & Talbert, 2001; 2006; Shulman & Shulman, 2004). The assumptions underlying these studies is

that teachers learn best when they work with others on classroom level problems of practice. It is reasonable to expect that new programs seeking to influence the learning of teachers will follow a collaborative learning model, as is the case with Connecticut's TEAM.

Examining the structure of the TEAM program, several elements identified in the literature discussed above can be seen. The primary purpose of TEAM is to serve as a vehicle for professional learning in beginning teachers (Ellis, 2012a; 2012b). It works through a collaborative learning model in which a beginning teacher works with a mentor to identify problems of practice in one of five domains that align with the essential knowledge outlined by Shulman (1987) and Feiman-Nemser (2001b). An essential component of the learning process is reflection that beginning teachers engage in individually and with their mentor. As a new and large scale state program, it remains to be seen the extent to which TEAM influences the learning of beginning teachers. Other studies have cited the role of policy in the professional learning of beginning teachers (Grossman & Thompson, 2004; Murchan, Loxley & Johnston, 2009). This study seeks to expand on that literature by examining the role TEAM played in the learning of beginning teachers as well as factors influencing their learning.

RESEARCH QUESTIONS

This study sought to answer the following questions:

1. How did beginning teachers and mentors believe their participation in TEAM influenced their professional learning?
2. How did beginning teachers believe their experience under TEAM will have lasting effects on their instructional practice?
3. What factors influenced the learning of beginning teachers under TEAM?

METHODS

This study falls within the category of a general interpretivist design. These methods are consistent with other policy analysis and implementation research (Placier, Hall, McKendall, & Cockrell, 2000; Hall & McGinty, 1997; Timar, 1989). The data used in this study are a subset of data collected related to district implementation of TEAM (Ellis, 2012a; 2012b). It focuses exclusively on interview data collected from six dyads of beginning teachers and their mentors.

Participant selection and data collection

This study is based on data collected from in-depth interviews with six dyads of beginning teachers and their mentors (two dyads from each of three districts). Three school districts were selected based on demographic characteristics. The districts were chosen based on their District Reference Group (DRG), a construct created by the state of Connecticut to group like districts across the state. DRGs are based on a number of demographic factors, primarily economic similarities (e.g., per capita income, median home price) as well as an educational profile of the district (i.e., average levels of educational attainment of residents). DRGs range from “A” to “I” with “A” being the wealthiest, most highly educated, to “I” being the most economically depressed and lowest average level of educational attainment. In order to control for contextual factors such as extremes of poverty or wealth, the districts involved in this study were selected from the mid-range DRGs, D-G. All of the districts included were from the same DRG. The specific DRG chosen is not identified as a measure to protect the confidentiality of participants.

In selecting participating districts, seven were initially contacted in the spring of 2011. Of that seven, one declined to participate outright and the other six agreed to participate. Of the

remaining six, one district agreed but was unable to provide access to all of the required participants which excluded them from the study. Another district superintendent agreed but failed to return follow-up phone calls, removing them from the pool. A third agreed in the spring of 2011 but over the summer experienced a change of administration in central office as well as at the high school and middle school. The new administration withdrew from the participant pool. The remaining three districts agreed and participants were recruited successfully from the available beginning teachers and mentors.

At the school level, two dyads of beginning teachers and their mentors were interviewed from each district (a total of six dyads). The beginning teachers involved were either actively involved with TEAM or completed their involvement within the previous six months of data collection. While this study initially planned to focus exclusively on one content area, the realities of the available participants within each district made it impossible to limit to a single content area. While each district and participating school had enough beginning teachers to participate, the pool of available participants was too small to be selective. This led to the participant pool being a sample of convenience rather than a purposive sample. Invitations to participate went out to every beginning teacher in the district at the secondary level (high school and middle school) based on a list of names provided by the district facilitator. In only one setting was there an over-enrollment of participants with three dyads responding that they would participate. In that case, scheduling conflicts made it difficult to interview the third dyad. As I had collected data from two dyads already, I did not pursue the third dyad.

Table 1 contains a list of participants including their grade level and subject area. In the case of two dyads, mentors and beginning teachers were not paired based on content area. This was due to the availability of trained mentors within each district. Despite the minor variance in

grade level and subject area of the participants, the nature of the interview questions focused more generally on the understanding of and experience with TEAM. It is unlikely that there would be any significant variance in a person's understanding and experiences due to their subject matter.

All of the teacher interviews were conducted individually between September 2011 and March 2012. Interviews lasted between twenty and forty five minutes. Beginning teachers and their mentors were interviewed separately in order to establish a greater sense of confidentiality and to allow each participant the freedom to speak open and honestly about items related to their counterpart. All interviews were conducted in the teacher's classrooms after school. Ten were conducted in person and two were conducted over the telephone. All interviews were recorded, assigned an alpha-numeric code and transcribed by a private transcription service. A master code list was kept by the researcher on a secure, password protected computer.

Data analysis

Interview transcripts, thematic summaries, and artifacts were manually coded on two levels (Basil, 2003; Miles & Huberman, 1994). The first level of cut coding was based on an initial list of codes developed from relevant literature related to the areas of policy implementation and sense-making. During the initial coding process, other codes were developed as needed to supplement the initial list. After a first round of coding, a second round of pattern coding (Miles & Huberman, 1994) was used to condense the initial codes into different categories for analysis.

Table 1. Study Participants*					
Level	Location/District	Name	Role	Dyad	Grade/Subject
School	Sunnydale	Allison	Mentor	A	9-12, Social Studies
	Sunnydale	Jenn	Beginning Teacher	A	9-12, Social Studies
	Sunnydale	Rosette	Mentor	B	9-12, English
	Sunnydale	Tim	Beginning Teacher	B	9-12, English
School	Foreston	Barbara	Mentor	C	7-12, Special Education
	Foreston	Anna	Beginning Teacher	C	7-12, Business
	Foreston	Maria	Mentor	D	7-12, Science
	Foreston	Monica	Beginning Teacher	D	7-12, English
School	Quaker Hill	Louise	Mentor	E	7-8, English
	Quaker Hill	Cassie	Beginning Teacher	E	7-8, English
	Quaker Hill	Eva	Mentor	F	7-8, English
	Quaker Hill	Scott	Beginning Teacher	F	7-8, Tech Ed

*All names are pseudonyms

Each district case was analyzed separately. Once individual level analyses were completed, a cross-case synthesis (Yin, 2009) was conducted to report findings of similarities and differences among the cases.

Ensuring integrity of data and analysis

There are several elements that protected the validity of the design and the reliability of the data. Despite the small sample size, the study included two dyads from each district. By including more than one dyad per district, the data provide multiple points of comparison from which to draw conclusions within as well as across cases. Additionally, having multiple cases allows for a greater ability to consider elements that might otherwise confound a study based on a smaller participant pool. A final step in the collection and analysis of data was the use of member checks for accuracy of statements and of meaning. Participants were consulted to clarify

and/or verify the accuracy of the researcher's interpretations of some of the comments made during the interviews.

Subjectivity

There are several factors related to the researcher's position, status, and previous experience that may influence the subjectivity of this study. During the data collection, I was working as a high school principal in a district within the DRG from which the participants were drawn. One of the participating districts was the one in which I worked but it was not the school in which I worked. My position as principal privileged me in some ways in terms of gaining access to participants and in terms of differential power between the teacher participants and myself. State and district personnel were quick to respond to inquiries from a principal and may have been less responsive to a full-time researcher. There is also a sense among many administrators that they want to help each other in their educational pursuits. I knew, personally, at least one individual in each of the districts that ultimately participated. These connections eased my access to participants.

Several other elements of the study design mitigated the potential power differentials between the participants and me. Foremost, the ability of participants to withdraw from the study or to refuse to answer any questions created an initial safety net. Additionally, an assurance of confidentiality and that I would not be sharing the teachers' statements with district officials created another layer of safety. Prior to each interview, participants were asked if they were participating of their own will or if they felt that they were under pressure to participate. None of the participants said that they had been coerced in any way. Most of the participants laughed when asked that question and made jokes about "twisting arms."

In addition to my position as principal, I was involved with the previous iteration of the state induction program, the BEST. As a beginning teacher, I was a member of the first cohort after the pilot stage. I was very successful and my portfolio became the exemplar in social studies which was used to train other beginning social studies teachers during the 2001-2002 school year. I was also trained as a BEST mentor and cooperating teacher and worked with several teachers as they went through their BEST years. In two cases, I was called in to work with teachers that had not passed their portfolios the first time. Because of my positive experiences related to BEST, I have maintained a favorable opinion of the program despite the numerous criticisms it has endured. As this study does not seek to evaluate or compare TEAM against BEST per se, my opinions on the merits of each program should not create undue bias toward my interpretation of the interview data.

FINDINGS

The participants in this study provided a favorable, though general, appraisal of how TEAM influenced their professional learning. All of the beginning teachers said that they believed they had learned as a result of their involvement in the module process. Additionally, most beginning teachers said that they believed that their involvement with TEAM will have lasting effects on their practice; shaping their habits of mind as well as developing their knowledge base; however, most stated that they would be less formal in their approach than what is required by TEAM. What follows are the findings of this study. First, I present teacher perceptions of their learning under TEAM. Then teacher perceptions of the lasting effects of their learning on their instructional practice are presented. I conclude with the factors influencing the professional learning of new teachers under TEAM.

Teacher perceptions of their professional learning under TEAM

All of the beginning teachers that participated in this study stated that they believed they learned and improved as a result of their involvement with TEAM, though few were able to articulate specific examples of what they learned. When asked if they believed they had learned from the experience under TEAM, typical responses were brief and lacked detail, such as Anna's response:

I definitely learned a lot about like, how to improve my teaching and the way that I teach and what kinds of things I know will work for me.

When asked follow up questions in an attempt to clarify the types of things they had learned, most of the answers focused on the process the beginning teachers went through rather than the learning outcomes that resulted. Anna continued:

I mean, you have to focus on what is going wrong in your classroom and what things you need to improve on. So, that right there makes you more cognizant of things. But, also, having my mentor, you know, having her up there with me and helping me with lessons and stuff.

Similarly, Scott, a beginning teacher in Quaker Hill, did not articulate specific learning outcomes but commented on how he believed his thought process changed as a result of his involvement with TEAM:

I think my thought process was changed. I can say it was definitely changed because, again, the way that I looked at myself, my teaching, things that I did, how I go about solving problems. Tech Ed is a huge area where we look at problems and try to define it. I can say that definitely changed just within my teaching abilities and how I look at myself and how I staged my lessons and how I can bring [my students], scaffold information, bring them from point A to point B.

An interesting theme that occurred across participants was how they described the learning that took place. Most described their learning in terms of changes to their own cognitive processes or instructional strategies rather than in terms of insights into how students learn. For

example, Anna's comment recorded earlier about finding something that "worked for [her]" rather than developing new insights about what worked for *students*. Another beginning teacher, Tim from Sunnydale, commented on expanding his awareness of concepts that he had not previously been exposed to as a former private school teacher but he did not discuss how his new learning led to understandings or insights into his students:

Yeah, I definitely learned something.... So I remember that I was doing some reading on differentiating instruction, which I didn't know a ton about. You know, I just had heard the buzz word thrown around, but I didn't know about it, especially like coming from private schools. I just never really like knew what it was.

Tim's appraisal of his learning experience under TEAM was not typical of the other respondents in that he viewed the process as a benign requirement that had to be completed—in his words, "a hoop" to jump through. Tim's attitude and responses toward TEAM are explored further in the next two sections.

A notable exception to this trend of generalized responses was Jenn, a beginning English teacher in Sunnydale. She described her learning in terms of heightened awareness of her students:

I think it just was, the most important thing was like, the heightened awareness at that time of my students and their different learning styles because ..., I mean everyone knows there are different learning styles and you should vary things. But when you are writing about it and kind of assessing yourself it makes you think about it even more and come up with better ideas and more effective ideas. So I think it's that number one, maybe... not just more aware but more like, actively working to reach every different learning ability or style.

A key component to their learning that was cited by the beginning teachers was the opportunity to reflect on their experiences. Monica, a beginning teacher from Foreston, observed:

I felt like when I would look back at my reflection, that I was growing as a teacher and it was kind of nice to see that. I think it gave me an opportunity to reflect on the things that I would change or do differently, because I think that at the end of the day, you

sometimes are like, okay, tomorrow will be a better day, or it will be different. But when I had to think back on, and reflect on what I did, I had to be more honest with myself, I think, and actually draw up those awful memories of when something didn't go right, and try to figure out why. And so I think that, just, I think that for me, writing is just a really good way to reflect honestly.

One of the beginning teachers, Jenn from Sunnydale, provided a more specific example of how her reflection influenced her practice:

It made me more, I think it made me a better teacher because it made me, like, since I had to assess myself, I wanted to have a good assessment of myself. So you know, I did a better job of things. Then you know, I mean obviously I always try to do a good job but sometimes you don't reach every kid and with TEAM I really tried to make sure I did. Like when I planned, I thought "What will I do for the like the lower learning kids? Will they be able to do this? Will the honors level kids be able to do this without being bored to death?" That kind of thing.

Cassie, a beginning teacher from Quaker Hill noted that she believed becoming more reflective was itself the most significant learning outcome of her participation in TEAM:

It's definitely made me more reflective. I know I keep using that word, but it is definitely making me sit down and put into words what I'm thinking about, what I'm actually doing, which I think has been helpful to me.

In addition to the beginning teachers who said that they had learned, most of the participating mentors also believed they observed learning occur in their beginning teachers and, in some cases, commented on how their own professional learning was influenced by serving as TEAM mentors. For example, when asked if she believed participation in TEAM led to new learning in beginning teachers, Cassie's mentor, Louise, remarked that she believed her own learning was influenced:

Yes, I think for both the mentor and the mentee. I think it makes *me* remember that every lesson is connected to real learning. It's not just getting a project done; that it actually should have meaning, and focus, and connected to things that are knowledge that everybody needs to have. So, I think that maybe some people who need refreshing in their own teaching should be asked to be mentors. It's not a bad thing because you have to really look again at why am I doing this assignment, why am I assessing it this way,

why am I choosing to make this be important versus this be important and I think teachers who've been doing the same thing for years and years and have done it this way and that way—even if you've changed because of whatever—it makes you remember again, okay, this is connected to a bigger picture. It's not just about me as a teacher in a classroom teaching these students.

Additionally, Maria, a mentor from Foreston, noted that she believed her experience as a mentor led to her own improved teaching:

Being a TEAM mentor has actually made me a better teacher.... [I] almost informally do modules each quarter. Each quarter now, I say, "Okay, what little strategy am I going to try this quarter?" And it made me actually a little more formalized about the strategies I choose and assessing how they're working. And so, I think that the overall setup up of it is a really good mindset for teachers to be in.

Taken together, the responses of the participating beginning teachers and mentors lend support to the idea that the TEAM program influenced the professional learning of those participating. What is largely absent from their responses, however, are specific examples of what type of learning took place or specific descriptions of how that learning led to changed practice. The participants seemingly took for granted that they had learned and had implicit understandings of how their experience translated into changes in their practice. For each participant, perceptions of the learning that occurred were very personal. For some, they articulated general statements about how their instructional practices changed. For others, they articulated how their habits of mind changed either by thinking differently about how to approach problems or about reflecting on practice after teaching.

While it may be expected that teachers think and act differently during the completion of required tasks such as TEAM, the question remains about whether or not those tasks will have a lasting influence on teacher practice. The next section examines the perceptions of the beginning

teachers and mentors of whether or not they believed their experience with TEAM will have lasting effects on their teaching practice.

Teacher perceptions of the lasting effects of their learning on their instructional practice

The participants in the study shared mixed perceptions about how they viewed their experiences with TEAM and how the learning that occurred might influence their future practice. Almost all of the beginning teachers and mentors explained that the formal components of TEAM, such as the requirement to develop written plans, seek out research, and write reflection papers would not become part of their future practice. What they did believe would stay with them were the changes to instructional practice or the changes to their thinking that resulted from their module work.

Several teachers spoke generally about how they believed their experience with TEAM would have a lasting influence on their teaching practice. Monica, a beginning English teacher from Foreston, expressed her value in the professional development that she experienced under TEAM. She believed her teaching practice was changed as a result:

I always felt like professional development was very important, but I think that the research that I did, and the reflection that I did, that changed the way that I teach.

When asked if she believed the changes to her practice would be lasting, Jenn, a beginning teacher from Sunnydale, provided a more detailed response. She said that due to her work under TEAM she experienced an important change in how she approached planning based on student needs rather than her preconceived notions of where they should already be:

No I think it actually was lasting like, you know I think there are parts of TEAM that I just wanted to get done. But that part of it was more lasting because,... I don't know why actually, ... but you know if it makes you more involved then you keep doing it, becomes practice, then becomes habit.... I try to reach all different kids when I'm planning. I'm more realistic. I think before TEAM I was actually, I had, this sounds weird, but like too high of expectations for every kid, like unrealistic at times. So I was almost treating my average classes like honors classes and my honors classes like college classes and my

modified like average. So I've been able to really assess kids better and teach to where they are and what they should be reaching for instead some obscure goal I set in my head.

Other teachers described how the process that they went through during TEAM has had a lasting effect on how they think of and approach problem solving in their classes. For example, Anna, a beginning teacher in Foreston, described that she believed the process she followed of identifying problems of practice, seeking research and resources, planning and implementing strategies and reflecting on her practice would stay with her:

I think I'm going to keep doing that. I've already been looking at different things not related to TEAM. But I like learning about different things and seeing, you know, getting ideas from different places and trying to apply in my class.

In contrast with Anna, Tim, a beginning teacher in Sunnydale, explained that he found value in the experience but that he did not think the process would stay with him once he had completed the requirement:

You know, like I think, I don't know how many times that I would go back and like reflect and like write things down about what I teach on a day to day basis. You know, like you think like, "Well that was a good lesson, and that was a bad lesson." You know, there's little things that you'll change in your mind. But, I think the formal like writing of that is definitely like unique to TEAM. I definitely think that you learn by trial and error.

Cassie, a beginning English teacher in Quaker Hill, commented on how her experience with TEAM has made her a more reflective practitioner although in regards to her teaching she noted: "In terms of teaching strategies or philosophy, not really, to be honest. That's just kind of a self-reflection. That's how I see it."

Similarly, most of the mentors involved believed that the experiences with TEAM would have lasting influences on how the beginning teachers approached their instruction; however, they also echoed the sentiments that the formal procedures required of TEAM would likely not remain part of the practice of beginning teachers. For example, Cassie's mentor, Louise, commented on how the requirement to seek out research as part of the PGAP was "forced." She

emphasized the benefits of the hands-on portion of the program rather than the research component:

I think that's forced especially with brand new teachers. I mean they just came out of school and just came out of graduate school, and I use very few resources unless I'm told I have to or if it's something brand new that I'm asked to do. Like, I'm brand new in the last few years of co-teaching so yeah, I did look at some sources, and yes I did go to some things, but those kids—at least the one I'm with—is brand new out of school. She doesn't need the research part she needs the hands on part and the look at the curriculum part.

While most of the mentors believed that their mentees had learned and developed lasting changes to their practices, two mentors, Rosette from Sunnydale and Barbara from Foreston, were skeptical about two of their former mentees. Rosette explained that her experiences with Jenn were very different from another beginning teacher she had mentored. She believed that Jenn “definitely got a lot out of the process.” As for the other beginning teacher she said “I’m not really sure yet.” Barbara also had a similar experience, contrasting her work mentoring Anna with a beginning teacher she had mentored the previous year. Barbara described Anna as being conscientious whereas the other was “very difficult,” and that she had been assigned him because “there was no one else who administration thought could cope with him.” In contrasting these two individuals, when asked if she believed that the TEAM experience would have lasting effects on the instructional practice of beginning teachers, Barbara responded: “I think most of the teachers other than one or two I’ve seen come by, the one I mention specifically, nothing is going to affect him, but I think most people, yes.”

As with the participants’ perceptions of their learning under TEAM, their beliefs about the lasting effects of their experiences on their practice were mostly positive but general in nature, largely lacking in concrete examples. During the interviews, several factors emerged

which contributed both positively and negatively to their experience with TEAM. Those factors are discussed in the next section.

Factors influencing the professional learning of new teachers under TEAM

In examining the interview data on factors influencing the professional learning of beginning teachers, three themes emerged: the role of safety of risk, the effects of mentor pairing, and individual motivation. In addition, the beginning teachers and mentors shared their thoughts about other elements they believed would have helped them further as they experienced TEAM. These themes are explored below.

Safety of risk

The most common theme emerging from the interviews was the perception that TEAM provided a safe venue in which to experiment. The beginning teachers and mentors that participated cited feeling comfortable taking risks and that they were not afraid of the consequences for not “getting it right” the first time. As a result, they believed that they benefited more from the program than if it carried higher stakes. In particular, many of the mentors cited the former induction program, Connecticut’s BEST, as a point of contrast. For example, Rosette, a mentor in Sunnydale, commented:

It’s easier in the sense that it’s not as stressful for the beginning teacher, and it sort of implies that you’re supposed to make mistakes and show how you can grow from those. It didn’t really seem that way in the BEST.

She continued:

I feel like TEAM is more about making sure that a teacher is doing their job in the right way, because they continually say, “If you don’t do it right the first time, you can keep resubmitting it.” You really get the sense that although it’s supposed to be a two-year process, they really give you three if you need it.

Allison, also a mentor from Sunnydale, described how she believed the TEAM experience provided a safer and more realistic set of expectations for beginning teachers, especially when compared to her own experience under BEST. For Allison, the portfolio requirement under BEST was a monolithic stressor. She viewed the TEAM approach of breaking tasks down into smaller modules set teachers up for success and personal satisfaction at their accomplishments:

I think it's a more realistic approach to determine, and to continue the education of new teachers, to keep them focused on student learning. I mean, I just am remembering from my first year... Your first year teaching is about you surviving,... and then you have this huge [portfolio] that's kind of hanging over you. I like the idea, ... of smaller scale projects that are going to build up to something really grandiose. The idea that you can ... kind of chip away at these modules, and be successful at them ongoing, I think is probably going to be more satisfying and more rewarding to a first year teacher.

The mentors' opinions were echoed by many of the beginning teachers. Jenn, Rosette's mentee, shared her impressions that TEAM structured the experience in a way that felt like a growth experience rather than a punishment:

I think the purpose is to take new teachers and help them understand teaching better, not out of a textbook but in action like how to understand the reality of teaching and how to make it better. But it's in a way that doesn't make you feel like you're bad at your beginning point, like "You're bad, you need to get better," it's like "You're here, you need, you should try to get here."

Monica, a beginning teacher from Foreston, explained that she felt comfortable enough that TEAM was not "a gotcha sort of thing" that she felt a certain amount of freedom to take the time she needed to explore new research:

I feel like this is more trying to help you to be a better teacher, to be a better new teacher. And I've found that it's pretty flexible. I found that I could pursue what I want to pursue, and it kind of gave me an excuse to you know, read up on more current practices, which is probably what you should be doing anyways as a new teacher....

Anna's thought on TEAM summarized the perspectives of the other beginning teachers in the study: "I've seen it more as, like, a development tool rather than seeing how good we are. It is making us better."

The statements of the beginning teachers and mentors collectively demonstrate their sense that participation in TEAM is not a high stakes experience and that the reduced tension contributed to what was, overall, a positive learning experience. Despite the positive influence of perceived safety on the learning experience of the beginning teachers, not all of the factors influencing their experiences were positive. In some cases the mentor relationship as well as individual motivation influenced the experiences of the participants.

Mentor pairings

Another theme emerging from the interviews was the role that mentor pairings had on the learning experience of participants. All of the beginning teachers spoke well of their mentors and when asked if they thought they were well matched with their mentor, all of them said yes. Of the dyads in this study, two of six involved beginning teachers and mentors that were not in the same content area. For these two beginning teachers, despite having positive things to say about their mentor, both expressed that they were not able to fully engage with their mentor about content-specific questions. Instead, their conversations tended to be more global, focused on general pedagogical strategies such as classroom management or on logistical elements about how to fulfill the module requirements. Although the beginning teachers were appreciative of the help that they received from their mentors, the two teachers explained that they would likely have benefited more from a mentor in their own content area. Scott from Quaker Hill commented:

For me it would've been particularly helpful if I could have another mentor that was in my content area. Although I will say that I think I did benefit from having someone that was outside of my content area because I was able to see a whole different view. Because English class is a lot different than Tech Ed and she was able to give me a lot of pointers on some things that I wouldn't necessarily thought of or I have seen used in these types of classes.

Monica from Foreston, the other beginning teacher placed with an out-of-content area mentor, noted that her mentor "wasn't really my go-to person for English-y kinds of stuff." This finding is consistent with other studies of the mentor relationship (Soares & Lock, 2007).

Despite their formal mentor not being within the same content area, both Scott and Monica sought advice from colleagues within their departments who served as informal mentors for subject-specific questions. Although still assigned formal mentors, these two teachers had to seek out additional supports that the other beginning teachers with same-subject mentors did not. It is unclear what effect the pairing with an out-of-subject mentor had on the learning of both teachers, but both expressed the sense that they thought they would have gotten more out of the experience had they been paired with a subject-specific mentor.

Individual motivation and attitude

Consistent with other theory and research (Eccles & Wigfield 2002; Garrison, 1997), a third theme that emerged from the interviews was the role that individual motivation and attitude played in the learning of the beginning teachers. The motivation level of the beginning teachers in this study ranged from those who were described by their mentors as very conscientious and enthusiastic about their learning experience under TEAM and those that showed little motivation or enthusiasm. As can be predicted, the teachers that reported being motivated and enthusiastic about the process were more likely to identify substantive learning under TEAM than those who viewed TEAM as a "hoop." One of the participants, Maria, a mentor from Foreston, captured the

essence of the role that individual motivation and attitude play as influences on the TEAM experience:

I mean, there are just some people who are more reflective and who are more kind of experimental for whom this TEAM model of thinking fits right in with their own thinking and is a great model and kind of a framework for them. And there are other people who are just going to do what they're going to do and not really think about it and, for them, they wouldn't use the TEAM model anyways.

Two contrasting examples demonstrate this concept. Cassie, a beginning teacher from Quaker Hill, was described by her mentor, Louise: "She is amazing but she would have been amazing no matter what. The mentee I have this year is a very strong teacher and is going to be a strong individual." On the other hand, Sunnydale mentor Allison expressed frustration with her mentee, Tim. She compared Tim with a previous teacher saying "I think that one [the previous] is more reflective and thoughtful than the other." When asked what she ascribed the difference to she answered, "personality." "I think one is more thoughtful and more wanting to be successful because it's part of his kind of moral and ethical and general makeup. [Tim] wants to be successful because he likes to be successful."

Cassie and Tim's responses to questions about their learning were very different. Where Cassie was able to articulate clear examples of her learning, Tim's responses were largely superficial. As described earlier, Cassie described how one of the most important outcomes of her experience was becoming more reflective on her practice and her overall effectiveness. Tim reported that he had learned what was meant by "differentiation," a "buzz word" that he had heard but did not previously know what it meant. He did not describe using the concepts in his instruction. Cassie was able to provide details about instructional practices and how she tried different strategies as part of her module process. Tim explained how he trusted his instincts and was cavalier in his attitude about the value of what he was asked to do under TEAM.

From the mentor's perspective, Barbara from Foreston, had contrasting experiences with beginning teachers. The previous year, she had worked with a beginning teacher that she explained she inherited because "he was very difficult and there was no one else who the administration thought would cope with him." She explained that the current teacher she worked with (Anna) was very conscientious.

Individual motivation played a very important role in the learning of the beginning teachers in this study. As noted in another related study (Ellis, 2012a) individual motivation influenced the extent to which the beginning teacher engaged with TEAM and how they experienced the process. Those that engaged most closely with TEAM and who were described by their mentors as conscientious were more likely to report learning outcomes than those that were not. Tim, the beginning teacher from Sunnydale, who viewed TEAM as a "hoop," was least engaged with TEAM, despite frequent prodding by his mentor, and was the only beginning teacher that did not believe he had learned or "changed much" through his involvement with TEAM.

Extending the conversation, participant suggestions about how to increase the benefits of TEAM

Although the mentors and beginning teachers were generally positive about their experience with TEAM, several shared their thoughts about ways that they believed their experience would have been better. One thought that came up several times was the desire to have more informal meetings at the district level that would allow mentors and beginning teachers to discuss with others the experiences that they were having with TEAM. For example, Rosette, mentor in Sunnydale, stated:

I wish that there were more informal meetings where I could talk to other mentees or other mentors and their beginning teachers, so that we could go over some problems that we're all having. I feel like we're doing this in an isolated way, and I'm not really sure that that's the intention of the process.

Rosette's sentiment was shared by Louise, a mentor in Quaker Hill:

I would like to meet as everybody who's a part of it and see who they are, know what their position is. Yeah, I think that would be kind of nice to have kind of like an inter-district or district TEAM something where you know who everybody is. Like I said, I don't know; when we had that one meeting about module 5 I think it was just people who were mentors and mentees and [the District Facilitator]. I don't even know who else is involved and at what level and what they do. I don't know you know?

The comments above reveal a desire on the part of the mentors and beginning teachers to share their thoughts with others going through the same experience. By meeting and talking with other mentors and beginning teachers, it was thought that the learning experience would be richer and that all of the participants would learn more and benefit from a collective learning instead of what occurs between just the mentor and beginning teacher. When asked follow up questions about whom they would want to sponsor these meeting, be it the state or local districts, the respondents stated a preference for local meetings. Taken together, the comments provided by the mentors and beginning teachers provide instructive feedback to districts about ways they could structure additional supports to aid their beginning teachers and mentors to maximize their learning through TEAM.

DISCUSSION

This study sought to illuminate teacher perceptions of the professional learning they experienced through their involvement with Connecticut's new state induction program, the Teacher Education and Mentoring (TEAM) program. Overall, the participants in this study believed that their involvement in TEAM led to professional learning for both beginning teachers and mentors, although their sense of how that learning influenced their practice was general with

few explicit examples. Several factors influenced the learning experiences of participants, namely: their feeling of safety with the program and that they were able to experiment and take risks without fear of negative repercussions, the pairing of the mentor and beginning teacher, and the individual motivation and attitude of the beginning teacher.

The findings of this study contribute an example of the potential for state policy to influence the professional learning of beginning teachers. While many states and districts seek ways to foster teacher professional learning, this study examines a new program designed to accomplish that goal. While the program is in its early stages of implementation participants in this study stated their belief that their involvement in TEAM led to their professional learning.

Due to the small number of participants in this study, it is impossible to say with certainty that the findings are generalizable across settings; however, within this group of participants, the findings suggest that the TEAM program plays a role in developing their professional learning. The other findings of this study are consistent with previous research; in particular, the finding that pairing subject specific mentors with beginning teachers is preferable to out-of-content teachers (Soares & Lock, 2007). Additionally, the findings of this study are consistent with Eccles and Wigfield's (2002) and Garrison's (1997) discussion of the role that motivation played in the learning of individuals. As demonstrated by several of the participants, their willingness to engage with TEAM was largely a factor of individual motivation and the type and depth of their learning experiences were influenced by their engagement. Lastly, the ways in which the beginning teachers and mentors described their learning process were consistent with Shulman and Shulman's (2004) concept of "communities of practice" in that for most participants, learning occurred as a result of their interactions with each other. In fact, when considering the suggestions provided by several of the participants to expand meetings to include more

participants, it reveals a desire for some to be involved in wider communities of practice to enrich their learning experience.

Limitations of the study

Several factors create limitations to this study. One major limiting factor relates to the study's design. By relying exclusively on interview data without direct observation of teacher behavior, the results may suffer from the biases inherent in self-reporting, namely a potential to under-report certain behaviors or to respond to questions in "socially desirable" ways (Donaldson & Grant-Villone, 2002, p. 247). As this study relies on self-reports, it is unable to assess the verity of participant responses or the depth of the learning that may (or may not) have occurred.

Another limitation relates to the selection of districts to participate. By selecting districts in the middle of the DRGs, it was intended to avoid the discrepancies of implementation and inequities caused by comparing districts from different socio-economic statuses. By doing this however, the study ignores some factors that may influence potential learning outcomes. As the TEAM program is highly decentralized, it is reasonable to assume, based on other research (Johnson, Kardos, Kauffman, Liu, & Donaldson, 2004; Kardos & Johnson, 2010) that how teachers experience TEAM will be affected by socio-economic factors. Additional research could examine questions of equity and the relationship between socio-economic factors and how teacher experiences with TEAM vary.

Additionally, the selection of the mentor dyads was based on convenience and availability. I was unable to be selective about which dyads to interview. While the available pool reflected the experiences of the beginning teachers who participated, a larger participant pool would likely have provided the ability to better compare across disciplines and schools.

A final factor limiting the study relates to the nature of qualitative research in general. As this study employs an interpretivist design, it describes the experiences of a limited number of participants. While the examples provided may illuminate ways in which the program is implemented in the participating districts, they are insufficient to draw broader conclusions about implementation across contexts, especially given the lack of variability in DRG status.

Recommendations for practice

Based on these findings, local districts may maximize the learning experiences of their beginning teachers in several ways. First, districts should seek ways to recruit and train mentors from all fields including elective areas and “specials.” As noted by the participants in this study as well as previous research (Soares & Lock, 2007), beginning teachers believe that they learn more when working with a mentor in the same content area than when working with someone outside of their content area. Finding qualified mentor candidates is not always easy, and especially in smaller schools which may not have more than one elective or “specials” teacher, it may be impossible to match a beginning teacher with a subject-specific mentor within the school. In these cases, in addition to assigning a school-based mentor, districts may seek to pool their resources by developing regional networks of teachers by subject area that can serve as additional supports for beginning teachers. These networks could also be facilitated online through the state TEAM website. In an earlier study on district implementation of TEAM (Ellis, 2012a) several teacher identified the value of the TEAM website and their desire to engage with other beginning teachers and mentors about their experiences with the program. By providing these larger communities of practice online, teachers who are not assigned a subject-specific mentor can still receive in-school help but will also have a larger network to turn to for guidance on content-specific questions. An additional suggestion for districts would be to schedule

meetings throughout the course of the year that would bring in mentors and beginning teachers across the district to discuss their experiences and to provide them the opportunity to ask questions and collectively problem solve. These meetings could be facilitated by the TEAM District Facilitator and would provide an additional layer of support for beginning teachers and their mentors.

Despite the findings of this study, several questions remain unanswered, in particular what specifically the beginning teachers learned and how they translated that learning into practice. With a paucity of explicit detailed explanations about what learning occurred and how that learning transformed teacher practice, one may question if this suggests that either learning did not occur, or that the learning that took place was subtle, tacit, and difficult to articulate. As Merriam, Caffarella, and Baumgartner (2007) point out, the learning process that occurs as novices become experts is complex and difficult to define and measure. Further study in this area is warranted to develop a clearer picture of the learning of beginning teachers and the role that TEAM may play in facilitating that learning. Additional research on the role of TEAM in the learning of beginning teachers could focus on small-scale qualitative studies focused on multiple-case observations of beginning teachers over the course of their experience with TEAM. Such studies could observe the instructional practices of beginning teacher, observe the regular mentor meetings as well as informal interactions with colleagues, and analyze the documents created by the beginning teachers related to TEAM; in particular, the professional growth action plans, mentor logs, and the module reflection papers. Such studies would illuminate the influence of mentorships and the role of state policy in facilitating the professional learning of beginning teachers.

REFERENCES:

- Ball, D. L., & Cohen, D. K. (1999). Developing practice, developing practitioners: toward a practice-based theory of professional education. In *Teaching as the Learning Profession*, Linda Darling-Hammond and Gary Sykes (Eds). San Francisco, CA: Josey-Bass.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28(2), 117-148.
- Basit, T.M. (2003). Manual or electronic? The role of coding in qualitative data analysis. *Educational Research*, 45 (2), 143–154.
- Boud, D., & Garrick, J. (eds.) (1999). *Understanding learning at work*. New York: Routledge.
- City, E. A., Elmore, R. F., Fiarman, S. E., & Teitel, L. (2009). *Instructional rounds in education*. Cambridge, MA: Harvard Education Press.
- Connecticut State Department of Education. (2012). *Connecticut TEAM website*. Retrieved November 20, 2012, from <http://www.ctteam.org>.
- Davis, B. & Higdon, K. (2008). The Effects of Mentoring/Induction Support on Beginning Teachers' Practices in Early Elementary Classrooms (K-3), *Journal of Research in Childhood Education*, 22:3, 261-274.
- Darling-Hammond (1998). Teacher learning that supports student learning. *Educational Leadership*, 55(5), 6-11.
- Darling-Hammond, L., & Bransford, J. (Eds.) (2005). *Preparing Teachers for a Changing World: What Teachers Should Learn and Be Able to Do*. San Francisco, CA: Jossey-Bass.
- Dempsey, I., Arthur-Kelly, M., & Carty, B. (2009). Mentoring early career special education teachers. *Australian Journal of Education*, 53(3), 294-305.
- Desimone, L., Porter, A.C., Garet, M., Suk Yoon, K., & Birman, B. (2002). Effects of professional development on teachers' instruction: Results from a three-year study. *Educational Evaluation and Policy Analysis*, 24(2), 81-112.
- Dewey, J. (1938). *Experience and learning*. New York: Kappa Delta Pi, MacMillan.
- Driscoll, M.P. (2000). *Psychology of learning for instruction*. 2nd ed. Boston: Allyn and Bacon.

- Eaker, R., DuFour, R., & DuFour, R. (2002). *Getting started: restructuring schools to become professional learning communities*. Bloomington, IN: National Education Service.
- Eccles, J. S., & Wigfield, A. (2002). Motivation, beliefs, values, and goals. *Annual Review of Psychology*, 53, 109-132.
- Evertson, C. M., & Smithey, M. W. (May-June 2000). Mentors effects on proteges' classroom practices: an experimental field study. *The Journal of Education Research*. 93(5), 294-304.
- Ellis, C. D. (2012a). Making sense, making do: Local district implementation of a new state induction policy. An unpublished dissertation article, University of Connecticut, Storrs.
- Ellis, C. D. (2012b). Working the angles: Connecticut's new teacher induction program as High Leverage Policy. An unpublished dissertation article, University of Connecticut, Storrs.
- Feiman-Nemser, S. (2001a). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record*, 103, 1013-1055.
- Feiman-Nemser, S. (2001b). Helping novices learn to teach: Lessons from an Exemplary Support Teacher. *Journal of Teacher Education*, 52(1), 17-30.
- Feiman-Nemser, S. (2003). What new teachers need to learn. *Educational Leadership*, 60(8), 25-29.
- Fenstermacher, G. D., & Richardson, V. (2005). On making determinations of quality in teaching. *Teachers College Record*. 107(1), 186-213.
- Fenwick, T. J. (2000). Expanding conceptions of experiential learning: A review of the five contemporary perspectives on cognition. *Adult Education Quarterly*, 50(4), 243-272.
- Fenwick, T. J. (Spring, 2004). Teacher learning and professional growth plans: Implementation of a provincial policy. *Journal of Curriculum and Supervision*, 19(3), 259-282.
- Fletcher, S., Strong, M., & Villar, A. (2008). An investigation of the effects of variations in mentor-based induction on the performance of students in California. *Teachers College Record*, 110 (10), 2271-2289.
- Flores, M. A. (2001). Person and context in becoming a new teacher. *Journal of Education for Teaching*, 27(2), 135-148.
- Garet, M., Porter, A., Desimone, L., Birman, B., & Yoon, K. (2001). What makes professional development effective? Analysis of a national sample of teachers. *American Education Research Journal*, 38(3), 915-945.
- Garrison, D. R. (1997). Self-directed learning: Toward a comprehensive model. *Adult Education*

Quarterly, 48(1), 18-33.

Gilbert, L. (2005). What helps beginning teachers? *Educational Leadership*, 62(8), 36-39.

Glazerman, S., Senesky, S., Seftor, N., & Johnson, A. (2006). Design of an impact evaluation of teacher induction programs. Mathematica Policy Research, Inc., ref. # 6137-070.

Glazerman, S., Isenberg, E., Dolfin, S., Bleeker, M., Johnson, A., Grider, M., & Jacobus, M. (2010). Impacts of comprehensive teacher induction. United States Department of Education, NCEE 2010-4027.

Glazerman, S. & Seifulah, A. (2012). An evaluation of the Chicago teacher advancement plan (TAP) after four years. Mathematica Policy Research, Inc., ref. # 06736-520.

Goe, L., & Stickler, L. (2008). *Teacher quality and student achievement: Making the most of recent research*. Washington, DC: National Comprehensive Center for Teacher Quality.

Goldstein, I. L., & Ford, J. K. (2002). Training in organizations. Belmont, CA: Wadsworth.

Gravani, M. N. (2007). Unveiling professional learning: Shifting from the delivery of courses to an understanding of the processes. *Teaching and Teacher Education*, 23, 688-704.

Grossman, P., & Thompson C. (2004). District policy and beginning teachers: A lens on teacher learning. *Educational Evaluation and Policy Analysis*, 26(4), 281-301.

Grove, K., Strudler, N., & Odell, S. (2004). Mentoring toward technology use: Cooperating teacher practice in supporting student teachers. *Journal of Research on Technology in Education*, 37 (1), 85 – 109.

Hall, P. M., & McGinty, P. J. W. (1997). Policy as the transformation of intentions. *The Sociological Quarterly*, 38(3), 439-467.

Holton, E. F., & Balwin, T. T. (2003). Improving learning transfer in organizations. San Francisco, CA: Jossey-Bass.

Ingersoll, R. M. & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers: a critical review of the research. *Review of Educational Research*, 81(2), 201-233.

Ingersoll, R. M. (1997). Teacher turnover and teacher quality: the recurring myth of teacher shortages. *Teachers College Record*, 41-44.

Ingersoll, R. M. (2001). Teacher turnover and teacher shortages: an organizational analysis. *American Educational Research Journal*, 38(3), 499-534.

- Julius, A.K. (1976). Britain's new induction plan for first year teachers. *The Elementary School Journal*, 76(6), 350-357.
- Kauffman, D., Johnson, S.M., Kardos, S.M., Liu, E., & Peske, H.G. (2002). Lost at sea: new teachers' experiences with curriculum and assessment. *Teachers College Record*, 104(2), 273-300.
- Kolb, D. (1984). *Experiential learning: Experience as the source of learning and development*. New Jersey: Prentice Hall.
- Lave, J., & Wenger, E. (1991). *Situated Learning - legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Legislative Program Review and Investigations Committee (December 2007). *Beginning Educator and Support Program*. Connecticut General Assembly: Hartford, CT.
- Lieberman, A., & Mace, D. P. (2010). Making practice public: teacher learning in the 21st century. *Journal of Teacher Education*, 61(1-2), 77-88.
- Long, J. (1997). The dark side of mentoring. *The Australian Educational Researcher*, 24(2), 115-133.
- Luft, J., Roehrig, G., & Patterson, N. (2003). Contrasting landscapes: A comparison of the impact of different induction programs on beginning secondary science teachers' practices, beliefs, and experiences. *Journal of Research in Science Teaching*, 40(1), 77-97.
- McLaughlin, M. W., & Talbert, J. E. (2001). *Professional communities and the work of high school teaching*. Chicago: University of Chicago Press.
- Merriam, S. B., Caffarella, R. S., & Baumgartner, L. M. (2007). *Learning in adulthood (3rd ed.)*. San Francisco: Jossey-Bass.
- Miles, M. B. & Huberman, A. M. (1994). *Qualitative data analysis*. Thousand Oaks, CA: Sage.
- Muchan, D., Loxley, A., & Johnston, K. (2009). Teacher learning and policy intention: selected findings from an evaluation of a large-scale programme of professional development in the Republic of Ireland. *European Journal of Teacher Education*, 32(4), 455-471.
- National Commission on Teaching and America's Future. (1996). *What matters most: Teaching for America's future*. New York: Author.
- National Council on Teacher Quality. (2004). *Increasing the odds: How good policies can yield better teachers*. Washington, DC: Author.

- Packer, M., & Goicoechea, J. (2000). Sociocultural and constructivist theories of learning: Ontology, not just epistemology. *Educational Psychologist*, 35(4), 227-241.
- Placier, M., Hall, P. M., McKendall, S. B., & Cockrell, K. S. (2000). Policy as the transformation of intentions: making multicultural education policy. *Education Policy*, 14(2), 259-289.
- Rice, J. K. (2003). *Teacher quality: Understanding the effectiveness of teacher attributes*. Washington, DC: Economic Policy Institute.
- Roth, W.-M., & Lee, Y.-J. (2007). "Vygotsky's neglected legacy": Cultural-historical activity theory. *Review of Educational Research*, 77(2), 186-232.
- Schon, D. (1983). *The reflective practitioner*. New York: Basic Books.
- Sfard, A. (1998). On two metaphors for learning and on the danger of choosing just one. *Educational Researcher*, 27(2), 4-13.
- Sheckley, B. G. & Keeton, M. T. (1997a) Service learning: A theoretical model, Service Learning, Ninety-sixth Yearbook of the National Society for the Study of Education, 32- 55.
- Sheckley, B. G. & Keeton, M. T. (1997b). Improving employees development: Perspectives from research and practice. Chicago: Council for Adult and Experiential Learning.
- Sheckley, B. G. & Keeton, M. T. (1997c). A review of the research on learning: Implications for the instruction of adult learners. A paper presented to the AAHE planning meeting, Denver, Colorado, May 7-8, 1997.
- Shulman, L. (1987). Knowledge and teaching: foundations of the new reform. *Harvard Educational Review*, 57(1).
- Shulman, L. S. & Shulman, J. H. (2004). How and what teachers learn: A shifting perspective. *Journal of Curriculum Studies*, 36(2), 257-271.
- Smith, T. M. & Ingersoll, R. M. (2004). What are the effects of induction and mentoring on beginning teacher turnover? *American Educational Research Journal*, 41(3), 681-714.
- Soares, A., & Lock, R. (2007). Pre-service science teachers' perceptions of written lesson appraisals: the impact of styles of mentoring. *European Journal of Teacher Education*, 30(1), 75 – 90.
- Stanulis, R. N. & Floden, R. E. (March/April 2009). Intensive mentoring as a way to help beginning teachers develop balanced instruction. *Journal of Teacher Education*, 60(2), 112-122.

- Stroble, E. & Cooper, J.M. (1988) Mentor teachers: coaches or referees? *Theory Into Practice*, 27(3), 231-236.
- Strong, M. (2005). Teacher induction, mentoring, and retention: A summary of the research. *The New Educator*, 1, 181-198.
- Thompson, M., Paek, P., Goe, L., & Ponte, E. (2004). Relationship of BTSA/CFASST engagement and teacher practices. Educational testing Services, RR-04-31.
- Timar, T. B. (1989). The politics of school restructuring. *Journal of Education Policy*, 4(5), 55-74.
- Vygotsky, L. (1930/1978). *Mind and society*. Cambridge, MA: Harvard University Press.
- Wang, J, Odell, S. J., & Schwille, S. A. (2008). Effects of teacher induction on beginning teachers' teaching: A critical review of the literature. *Journal of Teacher Education*, 59(2), 132-152.
- Wilson, S. M., & Floden, R. E. (2003). *Creating effective teachers: concise answers for hard questions*. Washington. D.C.: AACTE Publications.
- Wilson, S. M., Darling-Hammond, L., & Berry, B. (February 2001). A case of successful teaching policy: Connecticut's long-term efforts to improve teaching and learning. Center for the Study of Teaching and Policy, University of Washington, Document R-01-2.
- Yin, R. K. (2008). *Case study research: Design and methods* (Vol. 5). SAGE Publications, Incorporated.

Working the Angles: An Initial Appraisal of Connecticut's Teacher Education and Mentoring
Program as High Leverage Policy

By

Chad D. Ellis

A dissertation article submitted in partial fulfillment of
The requirements for the degree of

Doctor of Philosophy
(Educational Policy Analysis)

At the

UNIVERSITY OF CONNECTICUT
2012

Third of three

ABSTRACT

This paper analyzes Connecticut's new teacher induction program, the Teacher Education and Mentoring (TEAM) program using the High Leverage Policy framework (HLP) developed by the Center for Education Policy Analysis at the University of Connecticut's Neag School of Education. Data presented here are part of a larger study examining the implementation of TEAM in the state. The study used data collected from twenty two semi-structured interviews with individuals at the state, district, and school levels as well as analysis of state level documents related to the TEAM program. This paper demonstrated how the HLP framework may be used as an analytical tool and compares the structure and implementation of TEAM against the HLP framework. It concludes that additional research, including quantitative studies investigating the potential association between participation in TEAM and student outcomes must be conducted before a full evaluation of the program can be made. Suggestions for additional quantitative and qualitative studies are provided.

INTRODUCTION

Educational reformers seek ways to effect change in schools that will lead to increased performance and opportunities for all students. Generally, the aim of reformers target one or more of what Kennedy (2005) refers to as the “reform ideals:” creating “more rigorous and important content, more intellectual engagement with content, and universal access to knowledge,” (p. 6). Toward these ends, researchers and policymakers seek ways to craft and communicate policies that will be successful at achieving a set of goals with a high degree of fidelity to their original intent; however, a great deal of research has demonstrated the difficulties of policy implementation and the failure of many policies to achieve the ends desired by those that crafted them.

There are many reasons that policies fail to achieve desired outcomes. Teacher-level factors are most often cited as the reason that educational reform policies fail to achieve their desired goals (Kennedy, 2005), due either to insufficient knowledge or guidance, conflicting beliefs, values, and attitudes between reformers and teachers, or contextual elements preventing teachers from implementing reforms. Additional reasons for the failure of policy to achieve desired outcomes have been well documented. Cognitive and affective factors influence how those charged with implementation understand, make sense of, and engage with policies (Ali, 2006; Coburn, 2001; Ellis, 2012a; Spillane, 2004; Spillane, Reiser, & Reimer, 2002;). Local context, resources, and capacity also influence implementers’ abilities to enact policy, often leading to policies *as enacted* looking very different from policies *as intended* (Berman, 1978; Hall & McGinty, 1997; Lipsky, 1980; Majone & Wildavsky, 1978; Placier, Hall, McKendall, & Cockrell, 2000). Although rare, others have argued that policies may fail because the goals on

which they are based are not reasonable or realistic, setting up for failure any policy seeking to achieve those goals (Kennedy, 2005; Kerr, 1976).

Still other factors influencing the way policies are enacted relate to the design of the policies themselves. Elements such as the “venue” (Weiss, 1995) in which implementation authority is vested (e.g., state, district, school) or the instruments used (McDonnel & Elmore, 1987; McDonnel, 2004) can determine who has decision making authority, what rules they must abide by, what resources they have at their disposal, and the limits of their power. Each of these structural factors plays an essential role in determining policy outcomes; in some cases enabling implementers to exercise authority and control and in others limiting their ability to act on policy messages.

Despite all of the challenges facing policy makers, legislators and researchers continue to “tinker” with the educational system (Tyack & Cuban, 1995); whether focusing on structural and systems changes, curriculum, assessment, or instructional strategies, legislation and regulations continue to be developed—albeit sometimes creating only superficial changes. The question that plagues researchers and policymakers is how to craft policies in ways that avoid the pitfalls of others and which stand a good chance of yielding expected outcomes. A helpful element in crafting policies that may be successful at achieving their goals is to follow a theoretical construct that allows for policy planning as well as analysis of existing policies. With such a framework, policymakers might develop policies and programs with an eye toward anticipating potentially confounding factors and can build into the implementation plan strategies for addressing these potentialities.

The High Leverage Policy Framework (HLP) was developed by the Center for Education Policy Analysis (CEPA) at the University of Connecticut. In conjunction with the Great Schools

Partnership, CEPA developed the framework as an analytical tool for states and local educational agencies to develop new and analyze existing policies designed to increase student outcomes. As a phrase, the concept of “high leverage” is largely subjective, but the framework defines as high leverage any policy that: “1. Increases academic aspirations, achievement, or attainment for all students, 2. Promotes greater equity in learning, performance, or life outcomes for students, 3. Generates positive ripple effects throughout an educational system,” (Cobb, Donaldson, Lemons, & Meyer, 2010, p. 3).

This paper uses the HLP framework to analyze Connecticut’s new teacher induction program. The Teacher Education and Mentoring (TEAM) program replaced the earlier Beginning Educator Support and Training (BEST) program. The TEAM program shifts direction in induction policy focusing on professional learning whereas the BEST program served as an assessment instrument—tying certification to successful completion of a portfolio. The TEAM program began implementation in the 2010-2011 school year. This paper provides an initial appraisal of Connecticut’s TEAM program. Using the HLP framework as an analytical lens, I examine structural elements of the program and explore the perspectives of those involved in the planning and implementation of TEAM at the state, district, and school levels.

A brief account of induction policy in Connecticut

Connecticut has been an example of a state that has developed “successful” reform policies in the past (Wilson, Darling-Hammond, & Berry, 2001). In particular, its former induction program, the Beginning Educator Support and Training (BEST), was well studied and widely known (Pechione, et al., 2005; Youngs, 2007; 2002). As cities and states look to establish or revise their own induction programs, Connecticut’s new model may be considered in their comparisons of other state and municipal programs. This analysis may be useful to policymakers

seeking examples and alternatives for high leverage induction policies and for academics and practitioners seeking an additional lens through which to view and analyze policies.

SETTING THE STAGE: CONTEXT FOR THE TEAM PROGRAM

The origin of Connecticut's TEAM program stems intellectually from several areas of research, namely scholarship on teacher quality, teacher induction, mentorships, and professional learning. In addition, TEAM grew out of a historical tradition of state policy targeting the induction stage of a teacher's career. This section traces the intellectual and historical origins of TEAM in order to provide a context for understanding the program's structure and intent.

Teacher Quality

TEAM is based fundamentally on the premise that student achievement is a direct function of the quality and capacity of the classroom teacher (CSDE, 2009). Although the phrase *teacher quality* is used widely, it would be more accurate to describe *teaching* quality as it is not easy to accurately assess individual teachers using models that account for the variable factors across contexts; from district to district as well as classroom to classroom (Kelly, 2012; Konstantopoulos, 2012). Even "value-added" models (Sanders & Horn, 1998; Villar & Strong, 2008) fail to account for all of the necessary factors in determining the influence of individual teachers (Konstantopoulos, 2012). A more viable approach would instead attend to particular strategies of teaching that have demonstrated consistent high yield in terms of effect sizes such as those identified by Marzano (2001/2012) in his meta-analyses of classroom effects.

Nevertheless, despite the shortcoming of assessments of teacher quality, attempts to measure and categorize teachers remain prominent in research and practitioner literature (Blanton, Sindelar, & Correa, 2006; Goe & Stickler, 2008; National Commission on Teaching

and America's Future, 1996; National Council on Teacher Quality, 2004). Most of the studies focusing on teacher quality draw a direct connection between teacher capacity, defined as a teacher's knowledge, skills, and dispositions, and student achievement (Blanton, Sindelar, & Correa, 2006; Goe & Stickler, 2008; National Commission on Teaching and America's Future, 1996; National Council on Teacher Quality, 2004). Although these studies vary as to their conclusions about what makes for a "good" teacher, they have focused on several common factors. One factor that has been studied could be described as teacher qualifications or background (Stickler & Goe, 2008; National Council on Teacher Quality, 2004), which consider the training, experience, content knowledge, and pre-service training among other elements. A second factor identified is teacher dispositions (Goe & Stickler, 2008) such as teacher attitudes and expectations for themselves and their students. A third, and arguably most valuable factor, are teacher instructional practices, often referred to as "best practices" (Goe & Stickler, 2008).

Collectively, the literature surrounding the concept of teacher quality and instructional best practices has served as the foundation on which TEAM has been built. A major assumption underlying the program is that teacher quality is directly related to professional knowledge and capacity. As a result, the program seeks to improve student performance by using teacher professional learning as a leverage point. Guided by recent legislation, TEAM focuses on the induction stage of a teacher's career and relies on mentorships and practice-based learning modules to promote teacher learning.

Teachers participating in the TEAM program must complete learning modules in five areas related to Connecticut's Common Core of Teaching: (1) classroom environment, (2) planning, (3) instruction, (4) assessment, and (5) professional responsibility and teacher leadership. For each module, beginning teachers and their mentors must identify a problem of

practice within the module's domain on which to focus and learn more. The mentor dyad then develops a Professional Goal Action Plan (PGAP) which identifies the problem of practice and outlines a learning plan in which the teacher and mentor conduct additional research, develop an action plan for implementation of the new learning in the classroom, and identifies the expected student outcomes associated with the new learning. Over the course of approximately eight to ten weeks, the mentor dyad meets and reviews progress. For each module, it is expected that the mentor dyad meets for a minimum of ten hours. At the end of the learning cycle, the beginning teacher must write a reflection paper which identifies the problem of practice and why it was chosen, the learning that took place for the teacher, and a discussion of how the new teacher learning manifested in student outcomes. The paper is submitted for review, either to an in-district review panel or out to a regional consortium for blind review. The decision to conduct in-district or regional review is made at the district level. Teachers that are successful on their reflection papers, move on to the next module. Unsuccessful papers are returned with comments for revision. Whereas with the BEST program, teachers failing to meet the portfolio requirements were denied continued certification, under TEAM, recommendation for continued certification come from the district. TEAM's focus on professional learning rather than assessment has led to teacher perceptions that it is a lower risk tool rather than a high-stakes assessment (Ellis, 2012a; 2012b).

TEAM's focus on professional learning rather than assessment has its roots in a long history of research on teacher induction and professional development (CSDE, 2010; 2012). The next section traces some of the history and evolution of thinking about induction policy and the role it should play in shaping the practice of beginning teachers.

Teacher induction, mentorships, and professional learning

As early as 1943, scholars examined the idea of the induction of new teachers (Tate, 1943). Early articles focused primarily on the induction of beginning teachers from a supervision and evaluation framework, concerned mostly with acculturating new teachers to their schools and helping them to fulfill the procedural tasks associated with their jobs (Edgar & Warren, 1969; Feiman-Nemser, 2001; Tate, 1943). However, beginning in the late 1990s, attention to the induction stage of a teacher's career took a shift of direction moving from its role as occupational socialization to a tool to satisfy market demands for teachers. Beginning in the mid-1990s, a significant portion of the teaching workforce nationally was preparing to retire. Policymakers and scholars noted the pending wave of openings and saw the need not only to recruit new teachers to the profession, but to retain those that started. Given the statistic that approximately one-third of all teachers leave the profession within their first three years (Ingersoll, 1997; 2001), there were concerns about the nation's ability to staff its classrooms with qualified teachers. In addition to teacher retirements, increases in school enrollments, as well as state policies such as California's class size reduction law, increased demand for teachers in key areas (Darling-Hammond et al., 1999; Ingersoll, 1997; 2001; Johnson, 2004; Johnson & Birkeland, 2003a; 2003b; Murphy, DeArmond, & Guin, 2003). Research on teacher supply has identified induction programs as an important influence on the retention of good teachers (Ingersoll, 1997; 2001).

Attention to the induction stage of a teacher's career shifted again when discussion moved from induction as a tool for retention to induction as an important period of professional learning for beginning teachers. Arguing for a comprehensive and cohesive plan for professional learning, pre-service through professional development, Feiman-Nemser (2001a) identified different stages of a teacher's career and the learning needs she or he would have during that

stage. In defining the learning needs of beginning teachers during the induction stage, she outlined a set of learning outcomes that included gaining local knowledge of students, curriculum, and school context, designing responsive curriculum and instruction, enacting a beginning repertoire of strategies, creating a classroom learning community, developing a professional identity, and learning in and from practice. This suggested set of learning objectives has proven influential in the development of induction models focusing on new teacher learning.

Armed with a sense of what new teachers needed to learn, the question remained how best to structure supports to achieve those ends. Traditional professional development, it was argued, had largely failed due to its disconnection from actual practice or a lack of follow-through (Ball & Cohen, 1999). Additionally, since the learning needs of beginning teachers differ from the learning needs of experienced teachers (Feiman-Nemser, 2001a), a set of supports tailored to the novice teacher was warranted. The most common form of induction support nationwide was, and remains, mentorships (Ingersoll, 1997, 2001; Ingersoll & Strong, 2011; Smith & Ingersoll, 2004). Mentorships have been shown to improve retention rates in beginning teachers (Ingersoll, 1997, 2001; Ingersoll & Strong, 2011; Smith & Ingersoll, 2004) and have also shown the potential to positively influence the professional learning of beginning teachers (Feiman-Nemser, 2001b). Some studies have also concluded that mentorships can have positive effects on student achievement (Fletcher, Strong, & Villar, 2008).

Of the potential benefits of mentorships, arguably the most important is the potential to support the professional learning and growth of beginning teachers. Several studies have examined the role that mentorships play in influencing the practices of beginning teachers. Davis and Higdon (2008) found that beginning teachers involved with university-based mentorships were more likely than their peers to report receiving frequent mentoring and support and

performed better on a standardized classroom observation protocol than their peers not involved in the program. Similarly, Stanulis and Floden's (2009) study concluded that teachers involved with mentorships performed better on a different common observation protocol than a comparison group. Another study concluded that beginning teachers that received mentorship performed better at classroom management, student engagement, and overall organization than a control group (Evertson & Smithey, 2000).

An additional and important component influencing the structure of the TEAM program is the intellectual model of teacher professional learning on which the program is based. Under TEAM, the mentor's role is to serve as a guide or coach and to facilitate the new learning of a beginning teacher. It is founded on an assumption that learning will occur and that the learning process resembles Vygotsky's (1930/1978) concept of the "zone of proximal development" in which a more experienced individual (in this case the mentor) aids the novice by providing enough support to allow her or him to extend learning beyond what they are capable of at the time (CSDE, 2012). Additionally, the nature of the learning that takes place is grounded in actual classroom practice instead of canned professional development activities, which aids in the importance and perceived legitimacy of the process (Ball & Cohen, 1999; Ellis, 2012b). It is important to note that TEAM is still in the early stages of implementation, and few studies have analyzed the role that TEAM might play in the learning of beginning teachers or of the potential association with student outcomes (Ellis, 2012a 2012b). As of now, the assumptions underlying the model remain to be tested and observed in depth.

History of induction policy in Connecticut: Shifting models and priorities

In addition to the conceptual framework on which TEAM is built, its historical legacy must also be recognized to understand its place and how it has been received by practitioners at

the school level. Connecticut's induction program stems initially from landmark state legislation that changed the way teachers were compensated and evaluated. In 1986, the *Educational Enhancement Act* (CT PA 86-01) raised teacher salaries across the state and, in exchange, stricter guidelines were put in place on teacher evaluation and certification. By the 1990s, Connecticut began developing what would be known as the Beginning Educator Support and Training (BEST) program. The BEST program served primarily as an assessment that functioned as a gatekeeper between beginning teachers and continued certification. New teachers meeting state requirements were issued "initial educator" certificates which allowed a person to teach on a probationary basis. The initial educator certificate was good for three years. Before being allowed to move on to a "provisional" certificate, the beginning teacher had to complete and pass a portfolio assessment in their second year. The portfolios were submitted to the state for scoring on a scale of one to four. A score of two was the minimum acceptable score to apply for provisional certification, with scores of three or four implying above average to exemplary performance. Individuals scoring a one were required to resubmit a new portfolio the following year and would continue on their initial certificate if requested by their superintendent. The BEST program was piloted through the 1990s and by 1999 was operational in most core content areas. Elective areas such as technology education or art, as well as other school personnel such as school counselors, were either exempt from the portfolio or had different requirements than core area teachers.

From the time of its inception through its ultimate end in 2007, the BEST program saw a steady decline in support and popularity among many practitioners at the district and school level. Common criticisms with BEST included: the onerous and burdensome nature of the requirement, the sense that it was too much additional work for a beginning teacher to do, the

variability in mentor availability and quality inter and intra-district, the overly complicated and sometimes contradictory directions and guidelines provided by the state to beginning teachers and mentors, and the absence of useful feedback on the portfolio (Ellis, 2012a; LPRIC, 2007).

An additional problem facing implementation of BEST was that the Connecticut State Department of Education was hampered by a steadily declining budget and personnel cuts. The program which had initially been funded for \$10 million dollars at its inception fell to \$5 million by 2007. Adjusted for inflation, the difference between dollars allocated to the BEST program was approximately \$9 million decrease over the program's existence (LPRIC, 2007).

In 2007, Connecticut's General Assembly ordered an evaluation of the BEST program to identify areas in need of improvement. The Legislative Program Review and Investigations Committee (LPRIC) produced a comprehensive report referred to by some as "the Red Book." The Red Book traced the history of BEST and identified areas of concern ultimately concluding with a set of recommendations for ways to change the BEST program to realign it with its initial purpose and to fix some of the problems that had been identified. Instead of amending the BEST program, the General Assembly eliminated it due in part to the Red Book report but largely due to the volume of individuals that spoke against the program in public hearings. By the end of the legislative session in the spring of 2008, the BEST program had been abolished creating a vacuum at the state level of formal supports for beginning teachers.

During the 2009 legislative session, the General Assembly passed a new requirement (CT PA 09-1, sec. 10-145o) that the CSDE develop a new teacher education and mentoring program designed to help beginning teachers in the first two years of their careers. The only specific requirement of the program dictated by the legislation was that it used mentorships as the

primary vehicle for the program. Over the course of the 2009-2010 school year, the CSDE developed the TEAM program and began implementing it during the 2010-2011 school year.

The differences in the intent and structure of BEST versus TEAM have been explored in greater detail elsewhere (Ellis, 2012a); however, it is important to highlight several factors influencing the implementation of TEAM. First, the focus of the program moved from one of *assessing* teacher performance in the first two years to one of teacher *professional learning*. A second major factor influencing TEAM's implementation was how the past experience of beginning teachers and mentors with BEST influenced their expectations and experience with the new program. It was found that mentors and beginning teachers identified positively with TEAM, often comparing it against the expectations and requirements of BEST (Ellis, 2012a). A third major difference was that although mentorships were an important component of BEST, under TEAM there are much stricter guidelines for the number of hours mentors and beginning teachers must meet and about the types of interactions and discussions that they have.

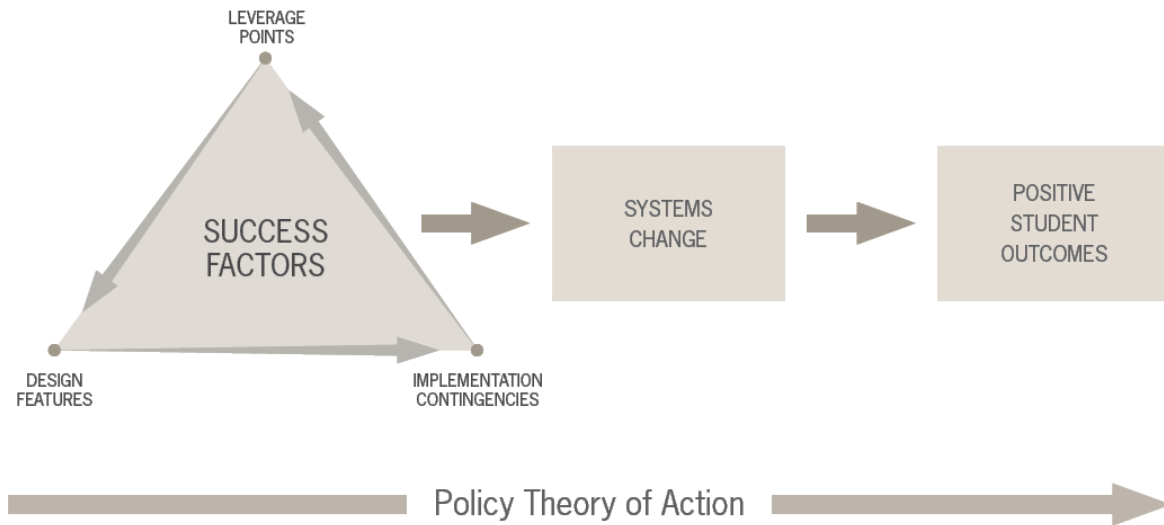
Taken together, the development of TEAM stems from a broad conceptual framework and a contentious political history. Although early studies have demonstrated that TEAM has been received positively by people at the district and school levels (Ellis, 2012a; 2012b) it has not been evaluated using an analytical model. The next section provides an overview of the High Leverage Policy framework developed by CEPA. It describes the components of the framework and identifies the ways in which it might be used to analyze policies. It begins with an overview of how the model was developed and explains the component parts of the framework.

HIGH LEVERAGE POLICY FRAMEWORK

The High Leverage Policy (HLP) framework was developed by the Center for Education Policy Analysis (CEPA) at the University of Connecticut's Neag School of Education. In conjunction with the Great Schools Partnership, the framework was released through the New England Secondary School Consortium, a regional partnership of five New England states: Maine, New Hampshire, Vermont, Connecticut, and Rhode Island "committed to fostering forward-thinking innovations in the design and delivery of secondary education across the New England region," (Cobb et al., 2010, p. 14). The purpose of the framework is to provide a tool for policymakers and practitioners to plan and develop new policies that seek to effect change and to analyze existing policies. As discussed earlier, the phrase "high leverage" creates a problem of definition due to its largely subjective nature. To remedy this problem, the framework defines as high leverage any policy that: "1. Increases academic aspirations, achievement, or attainment for all students, 2. Promotes greater equity in learning, performance, or life outcomes for students, 3. Generates positive ripple effects throughout an educational system," (Cobb, et al., 2010, p. 3). The framework presents a model of how various elements of a policy or program can interact to achieve high leverage results.

The model in Figure 1 shows the different components of the HLP framework. Summarized briefly, the "success factors" of a policy or program should lead to "systems change" which is a fundamental shift in thinking and acting in an educational venue (e.g., classroom, school, district, state, etc.). The systems change resulting from the policy should lead to positive student outcomes, defined as "higher educational aspirations, achievement or attainment; enhanced learning opportunities and instructional quality; and greater equity in learning, performance, or life outcomes for students" (Cobb, et al., 2010, p. 5). Underlying the

FIGURE 1: High Leverage Policy Framework



Source: Cobb, et al., 2010. Reproduced with permission of the authors.

process described above is a theory of action—a set of beliefs and assumptions about how the proposed policy or program will lead to the desired outcome.

The “success factors” listed above consist of a recursive relationship among three elements: leverage points, design features, and implementation contingencies. The leverage points can be thought of as either program goals or specific strategies that are intended to serve as engines of change leading to positive outcomes. An example of a leverage point expressed as a goal might be *building teacher capacity*; an example of a leverage point expressed as a strategy could be *reformulating district professional development format*. The design features refer to the intentionally constructed elements of the policy or program. For example, the features could account for the venue in which the program is implemented (e.g., within a local or state context), it could account for the policy instrument(s) used (e.g., mandates, inducements), the scope and scale of the policy or program, as well as their alignment with existing policies. The

implementation contingencies refer to contextual factors and other external elements that may influence how the policy or program is carried out. These contingencies refer to predictable known elements within the context in which the program is going to be implemented. Examples of implementation contingencies include leadership structures, local capacity, local will, stability of policy and people, and communication of policy intent (Cobb et al., 2010, p. 9).

The systems change discussed earlier can be anticipated but not known for sure until implementation begins. Of necessity, when using the HLP framework as a planning tool, it is necessary to describe generally the type(s) of changes and ripple effects that are expected which would lead to the desired goal. When using the HLP framework to analyze existing policies and programs, the visibility of systems change (i.e., what evidence of changes to practice, attitudes, culture) serves as an indicator of policy effect.

Two additional explanatory notes are worthy of comment. The “positive student outcomes” listed earlier are usually stated broadly (e.g., increased student literacy) rather than bound by a specific implementation goal (e.g., implementing a professional learning community). Keeping goals stated broadly focuses on the outcomes for students whereas “implementation goals” can result in a focus on process rather than product. Under a process-centered focus, it is sometimes easy to declare a program a success if implemented properly even if the outcomes for students are not evident. Last, the theory of action described earlier is a statement or set of statements constructed in “if/then” format (City et al., 2009). The theory of action tells the story of how it is believed that the particular leverage point(s) will lead to the positive student outcomes identified as the goal.

Taken together, the various elements of the HLP framework present a concise and logical tool for developing new or analyzing existing policies and programs. Although it can be argued

that the graphic model portrays the policy implementation process as unrealistically linear, the framework acknowledges the dynamic nature of policy implementation including the existence of unforeseen events that may influence the process. Even still, the model provides a useful heuristic against which policymakers and program developers can lay out their plans for dissection and analysis.

METHODS

This study falls within the category of a general interpretivist design. These methods are consistent with other policy analysis and implementation research (Placier, Hall, McKendall, & Cockrell, 2000; Hall & McGinty, 1997; Timar, 1989). It relies primarily on document analysis and is supplemented by interview data collected from participants at the state, district, and school levels.

Participant selection and data collection

This study is based primarily on content analysis of state level documents related to TEAM and BEST which are available publicly through the state legislature, the Connecticut State Department of Education (CSDE) website, or the TEAM program website. Additionally, district-based TEAM action plans were reviewed. These data were supplemented with in-depth, semi-structured interviews with twenty-two participants: seven at the state level, three district-level participants from three school districts, and six dyads of beginning teachers and their mentors (two dyads per district). At the state level, I interviewed a total of seven individuals involved with the development and implementation of the TEAM program: five program consultants at the Connecticut State Department of Education (CSDE) and two program contacts from separate Regional Educational Service Centers (RESCs) supporting the districts included in

this study. The state level participants provided an overview of the program history, its mission and the practical and political evolution from BEST to TEAM. The five program consultants at CSDE were interviewed together as a group for approximately one hour and forty minutes. The program contacts from the RESCs were interviewed separately for approximately one hour each. The interviews for all of the state level participants were conducted between July and August 2011.

Three school districts were selected based on their District Reference Group (DRG), a construct created by the state of Connecticut to group like districts across the state. DRGs are based on a number of demographic factors, primarily economic similarities (e.g., per capita income, median home price) as well as an educational profile of the district (i.e., average levels of educational attainment of residents). DRGs range from “A” to “I” with “A” being the wealthiest, most highly educated, to “I” being the most economically depressed with the lowest average level of educational attainment. In order to control for contextual factors such as extremes of poverty or wealth, the districts involved in this study were selected from the mid-range DRGs, D-G. All of the districts included were from the same DRG. The specific DRG chosen is not identified in this study as a measure to protect the confidentiality of participants.

In selecting participating districts, seven were initially contacted in the spring of 2011. Of that seven, one declined to participate outright and the other six agreed to participate. Of the remaining six, one district agreed but was unable to provide access to all of the required participants, which excluded it from the study. Another district superintendent agreed but failed to return follow-up phone calls, removing them from the pool. A fourth agreed in the spring of 2011 but over the summer experienced a change of administration in central office as well as at the high school and middle school. The new administration withdrew from the participant pool.

The remaining three districts agreed and participants were recruited successfully from the available beginning teachers and mentors.

Each district has a District Facilitator (DF) who is responsible for overseeing the planning and implementation of TEAM. Each DF was interviewed about their understanding of TEAM, how they developed their district plan, and how they envisioned its implementation. They were asked about the content of their district plan and asked about problems and opportunities that they experienced during the planning stage. They were asked about potential problems or opportunities that they experienced or anticipated with the implementation efforts of TEAM. DFs were interviewed between August 2011 and February 2012. These interviews took place after the first year of TEAM implementation (the 2010-2011 school year). Each interview lasted approximately one hour.

At the school level, two dyads of beginning teachers and their mentors were interviewed from each district (a total of six dyads). The beginning teachers involved were either actively involved with TEAM or completed their involvement within the previous six months. While this study initially planned to focus exclusively on social studies and English/Language Arts teachers, the realities of gaining access to participants within each district made it impossible to limit to just these two content areas. While each district and participating school had enough beginning teachers to participate, the pool of available participants was too small to be selective. This led to the participant pool being a sample of convenience rather than a purposive sample. Invitations to participate went out to every beginning teacher in the district at the secondary level (high school and middle school) based on a list of names provided by the district facilitator. In only one setting was there an over-enrollment of participants with three dyads responding that

they would participate. In that case, scheduling conflicts made it difficult to interview the third dyad. As I had collected data from two dyads already, I did not pursue the third dyad.

Table 1 contains a list of participants including their grade level and subject area. In the case of two dyads, mentors and beginning teachers were not paired based on content area. This was due to the availability of trained mentors within each district. Despite the minor variance in grade level and subject area of the participants, the nature of the interview questions focused more generally on the understanding of and experience with TEAM. It is unlikely that there would be any significant variance in a person's understanding and experiences due to their subject matter.

All of the teacher interviews were conducted individually between September 2011 and March 2012. Interviews lasted between twenty and forty five minutes. Beginning teachers and their mentors were interviewed separately in order to establish a greater sense of confidentiality and to allow each participant the freedom to speak open and honestly about items related to their counterpart. Ten were conducted in person in the teachers' classrooms and two were conducted over the telephone, all after school. All interviews were recorded, assigned an alpha-numeric code and transcribed by a private transcription service.

Data analysis

Interview transcripts were manually coded on two levels (Basit, 2003; Miles & Huberman, 1994). The first level of cut coding was based on an initial list of codes developed from relevant literature related to the areas of policy implementation. During the initial coding process, other codes were developed as needed to supplement the initial list. After a first round of coding, a second round of pattern coding (Miles & Huberman, 1994) was used to condense the initial codes into different categories for analysis.

The state level interviews and documents served as one case to determine the intentions of the policymakers for the TEAM program. Each district served as a separate case and was analyzed separately. Once site level analyses were completed, a cross-case synthesis (Yin, 2009) was conducted to report findings of similarities and differences among the cases.

Table 1. Study Participants*					
Level	Location/District	Name	Role	Dyad	Grade/Subject
State	CSDE	Connie	TEAM program consultant		
	CSDE	Julia	TEAM program consultant		
	CSDE	Dana	TEAM program consultant		
	CSDE	Bea	TEAM program consultant		
	CSDE	Lucia	TEAM program consultant		
	RESC	Faith	TEAM program contact		
	RESC	Liz	TEAM program contact		
District School	Sunnydale	Donna	Principal/District Facilitator		
	Sunnydale	Allison	Mentor	A	9-12, Social Studies
	Sunnydale	Jenn	Beginning Teacher	A	9-12, Social Studies
	Sunnydale	Rosette	Mentor	B	9-12, English
	Sunnydale	Tim	Beginning Teacher	B	9-12, English
District School	Foreston	Steve	Asst. Principal/District Facilitator		
	Foreston	Barbara	Mentor	C	7-12, Special Education
	Foreston	Anna	Beginning Teacher	C	7-12, Business
	Foreston	Maria	Mentor	D	7-12, Science
	Foreston	Monica	Beginning Teacher	D	7-12, English
District School	Quaker Hill	Ruben	Asst. Superintendent/District Facilitator		
	Quaker Hill	Louise	Mentor	E	7-8, English
	Quaker Hill	Cassie	Beginning Teacher	E	7-8, English
	Quaker Hill	Eva	Mentor	F	7-8, English
	Quaker Hill	Scott	Beginning Teacher	F	7-8, Tech Ed

*All names are pseudonyms

Ensuring integrity of data and analysis

There are several elements that protected the integrity of the data and analysis. At the state level, data were triangulated through the use of multiple interviews as well as review of policy documents. Triangulation is a standard practice in qualitative research (Patton, 1990) and seeks to “overcome the intrinsic biases that come from single-method, single observer, and

single-theory studies when they combine multiple observers and data sources,” (Bair & Bair, 2011, p. 19). At the district and teacher levels, the use of multiple cases allows for the consideration of contextual factors as influences to implementation. Having multiple cases allows for a greater ability to consider elements that might otherwise confound a study based on a smaller participant pool. A final step in the collection and analysis of data was the use of member checks for accuracy of statements and interpretation of meaning. In some cases, extended quotes were truncated for length. Participants were consulted to clarify and/or verify the accuracy of the researcher’s interpretations of some of the comments made during the interviews.

At the time of data collection, I was working as a high school principal. This position allowed me easier access to participants in other districts, as schools and administrators tend to assist each other in their educational pursuits. This ease of access, however, was mediated by several elements of the study design. Foremost, the ability of participants to withdraw from the study or to refuse to answer any questions created an initial safety net. Additionally, an assurance of confidentiality and that I would not be sharing the teachers’ statements with district officials created another layer of safety. Prior to each interview, participants were asked if they were participating of their own will or if they felt that they were under pressure to participate. None of the participants said that they had been coerced in any way. Most of the participants laughed when asked that question and made jokes about “twisting arms.”

Subjectivity

There are several factors related to my position, status, and previous experience that may influence the subjectivity of this study. As stated above, during the data collection I was working as a high school principal in a district within the DRG from which the participants were drawn.

One of the participating districts was the one in which I worked but it was not the school in which I worked. My position as principal privileged me in some ways in terms of gaining access to participants and in terms of differential power between myself and the teacher participants. State and district personnel were quick to respond to inquiries from a principal and may have been less so to a full-time researcher. There is also a sense among many administrators that they want to help each other in their own educational pursuits. I knew at least one person in each of the districts that ultimately participated. These connections eased my access to participants.

In addition to my position as principal, I was involved with the previous iteration of the state induction program, BEST. As a beginning teacher, I was a member of the first cohort after the pilot stage. I was very successful and my portfolio became the exemplar in social studies which was used to train other beginning social studies teachers during the 2001-2002 school year. I was also trained as a BEST mentor and cooperating teacher and worked with several teachers as they went through their BEST years. In two cases, I was called in to work with teachers that had not passed their portfolios the first time. Because of my positive experiences related to BEST, I have maintained a favorable opinion of the program despite the numerous criticisms it has endured. As this study does not seek to evaluate or compare TEAM against BEST per se, my opinions on the merits of each program should not create undue bias toward my interpretation of the interview data.

FINDINGS: ANALYZING THE TEAM PROGRAM THROUGH THE HLP FRAMEWORK

The purpose of this study is to analyze Connecticut's TEAM program through the analytical lens of the High Leverage Policy framework. This section presents data collected from in-depth interviews with individuals at the state, district, and local school levels and evaluates

how well TEAM fits the various components of the HLP framework. It begins with a brief example of how the TEAM program may be analyzed using the HLP framework. Then I discuss each component of the model, providing a closer look at the various elements constituting the program's intent, design, and implementation.

In order to analyze the TEAM program under the HLP framework, it is necessary to look deeper into the multiple components of the model described by Figure 1. As the overall design of the program is based on a set of assumptions grounded in research, the first element described is the theory of action which serves as the foundation for the model.

The Theory of Action behind TEAM

The theory of action behind the TEAM program asserts that by focusing on the professional learning of beginning teachers and by providing them the structure and supports needed to examine their practice, learn, and reflect their overall instruction will improve leading to positive student outcomes. The goal and prime motivation behind the development of the TEAM program was to improve student learning. In a clear and concise description of TEAM's theory of action, Faith, a state level program leader at a Regional Educational Service Center (RESC), explained:

The purpose of TEAM is to improve student achievement. Through impacting a teacher's daily practice.... [W]e ask our beginning teachers to go deep and analyze their practice in terms of classroom management and in terms of teaching and in terms of planning, in terms of assessing and then, finally, taking a look at their own professional responsibilities.... Wanting to know more about how they might improve their practice in any one of those areas and even asking them to tell us how their work with those modules would, indeed, impact student learning.

Faith continued by explaining her thoughts on how the TEAM process leads to improved student achievement:

I think that's what leads to student achievement is we know that teachers need time to reflect, to step back and look at their practice and those are the crucial elements of effective teaching. Planning, teaching, assessing, classroom management, being part of a professional community. All of those should lead to an impact on students.

Faith's description of the purpose and process of TEAM encapsulates succinctly the state's theory of action behind what beginning teachers are required to do to complete the learning module process. It highlights the domains in which new teachers and their mentors are expected to focus and it clearly states the goals of the process. The theory of action stated above aligns closely with the process one would expect from a high leverage policy. It sets broad and important goals related to student achievement. It describes the systems change that is expected to occur and it discusses the success factors that are expected to lead to change. A closer look at the structure and implementation efforts of TEAM will further reveal how closely it aligns with the theory of action.

The Leverage Points

The first of the success factors shown in the above model is the leverage point that the policy or program targets as its primary locus of intervention. The TEAM program identifies both strategy-oriented and a goal-oriented leverage points. The program is based on state induction policy that identifies mentorships (strategy-oriented) and professional learning (goal-oriented) as the leverage points to create systems change leading to positive student outcomes. The language of the statute itself, (CT PA 09-1, sec. 10-145o) identifies "teacher education and mentoring" specifically as the necessary components of the new program; the leverage points targeted to seek improved student outcomes.

The leverage points chosen under TEAM and the procedures put in place to support and achieve the program goals (*viz.*, the required mentoring contact hours, the PGAPs, and the reflection paper) fit the HLP framework. The leverage points target specific goals and strategies

that are aimed toward improving student outcomes. These leverage points and structures align with the stated theory of action and are logical entry points for leading to systems changes to teacher practice. How these leverage points interact with the other success factors determines the extent to which it will result in its stated goals. The next two sections describe further that interaction.

The Design Features: Policy instruments

The second of the success factors identified above are the design features of the program. Design features refer to the various structural elements of a policy or program and how those structures align. There are several key elements to the design of the program which are addressed below: the mechanisms and instruments used, the scope of the policy, and how the policy coheres within and across contexts.

Of the various policy instruments that could be used (McDonnell & Elmore, 1987; McDonnell, 2004), TEAM uses several different types to achieve its goals. Primarily, TEAM is based on a legislative mandate. It was established through state statute and is governed by regulations developed through CSDE. Districts are required to enroll all beginning teachers in the TEAM program and to assign them mentors. All beginning teachers must participate or else be denied continued certification. In addition, the state has used inducements to attract mentors to the program. Each mentor is provided a \$500 stipend per mentee, the cost of which is reimbursed to each district by the state. Previously under the BEST program, mentors were paid a stipend by the state but that stipend disappeared after state-level budget cuts. Although none of the mentors involved in this study cited the stipend as a motivation for their participation, all agreed that it was a minor but welcome gesture recognizing their time and effort.

In some ways, TEAM also employs both capacity-building and systems changing instruments as well. The main purpose behind the program is to develop capacity in beginning teachers and as a result the state has invested a good deal of time and money developing the program and supporting districts as they implement it. The manner in which TEAM has shifted control from centralization at the state level to district-level responsibility (Ellis, 2012a) represents a systems change, empowering local educational agencies to adapt the TEAM program to fit local exigencies. In some ways this has empowered some districts to develop a plan that functions well for them whereas under BEST they may have been hampered by the volume of state requirements and guidelines.

Program goals and policy coherence

A premise underlying the HLP framework is that policies that set ambitious and open goals rather than specific process oriented goals are more likely to yield positive policy outcomes. Focus on narrow goals or processes can lead to a myopic view of what is actually happening during implementation leading to a focus on process rather than outcomes. The primary goal of TEAM is to improve student learning outcomes by influencing teacher professional learning. The goals are broad in scope and the module process that beginning teachers and mentors go through requires them to constantly reflect on how their process influences the goals. In the final reflection paper completed at the conclusion of each learning module, beginning teachers must comment on their learning through the process, how their experience influenced their practice, and what the effects were on student learning outcomes. By setting broad and ambitious goals and requiring participants to continuously reflect on how their work influences those goals, TEAM meets this criterion as a high leverage policy.

Another important element of a high leverage policy is that it aligns and coheres with other policies within and across contexts; that is, it provides logical and practical alignment in support of other policies at the state level and across districts. The TEAM program revises a state induction policy and program that had been well established and which districts had been engaged with for many years. Districts, schools, teachers, and administrators were accustomed to the practice of assigning mentors to beginning teachers as a requirement of the induction program. TEAM maintained this fundamental similarity while removing some of the perceived regulatory shackles that limited the BEST program. Importantly for local districts, TEAM made logical sense with its alignment to Connecticut's Common Core of Teaching, the document that served as the basis for teacher evaluation across the state. Connie, one of the TEAM program consultants at CSDE noted that, by design, TEAM was meant to align with what teachers and districts did every day:

[S]chool districts began to see some of the requirements of the BEST portfolio as not fitting into some of the changes they were making at the ground level.... [I]t really has become a theme of the TEAM program to really integrate what you're being asked to do... to be very much in the work that you do day-to-day.

Additionally, Donna, the DF for Sunnydale noted:

This ties right in. This whole process ties exactly in with that whole cycle of teaching, learning and assessment. So it's making these teachers engage in that process, whether they like it or not, and hopefully learning more about themselves as educators and about the system as a whole. So I think it's great.

Also, Steve, the DF for Foreston noted that he saw the TEAM program as "supporting the CALI process"—the Connecticut Accountability for Learning Initiative, which is "is a statewide model of continuous school and district improvement with the goal of closing Connecticut's achievement gaps," (CSDE, 2012).

As part of the TEAM process, the state required each district to develop and submit a TEAM Action Plan describing the particulars of how the district would implement the program. To aid in that process, the state provided sample plans to districts and made it clear through the training sessions that it was acceptable for districts to simply adapt the plans to meet their needs. In this way, through previous experience with state induction policy as well as alignment with other state and district policies and programs, TEAM provided a coherent program that fit into existing structures.

Planning for implementation: Addressing potential obstacles to success

The final of the three success factors are the implementation contingencies. These are the contextual and/or external factors that influence how the policy is implemented. Among the factors are leadership and oversight, capacity, local will, the stability of policy and people, and the communication of policy intent. These contingencies are explored below.

Unlike with the BEST program, the design of TEAM shifts program control from the state to districts. Whereas before the state was the centralized authority for all elements of the BEST program, districts are responsible for structuring their TEAM Action Plans, for determining levels of acceptable performance, for providing mentors, and for providing professional development. This has been a significant change for many districts as Liz, one of the RESC staff noted:

I know that's one of the big concerns in the districts you hear across the state is what's going to happen ... it really created parity across the state when the state controlled it. I know now, talk about a shift in thinking, we've spent a lot of this year retraining mentors, updating mentors and then training mentors. And one of the things with the updates comes loud and clear is when participants get frustrated about some of the things they hear, they want to blame the state. And why isn't the state doing this and why isn't the state doing that? And that's a shift in thinking. Our state has to shift that thinking. It's no longer the responsibility of the state. The state has oversight. The state is there definitely. They are trying to support the districts in as many ways as they can. But it's really a district program. It's what your district wants to do.

Oversight of the program and review of district implementation is still the responsibility of the state, and although state audits of district programs are planned, as of the writing of this paper they have not yet begun. Local oversight is the responsibility of the District Facilitator who is the chief TEAM officer in each district and is the liaison between district and the state. At the state level, the Regional Educational Service Centers (RESCs) serve to assist District Facilitators as needed. Other school administration and school principals have a limited role in implementing TEAM. All that is required of principals is that they review the proposed PGAPs of their beginning teachers and approve them through the online system before they can proceed. In some schools and districts principals are more involved. Cassie and Scott's principal in Quaker Hill met with them individually during the formulation of each of their PGAPs whereas Tim and Jenn's principal in Sunnydale had no additional involvement with the program.

An additional factor influencing implementation of TEAM is district capacity. Capacity refers to a district's ability to implement a policy or program by having sufficient time, resources, and know-how. To ensure that districts have the capacity to implement TEAM, the state provided many hours of training to teachers and administrators across the state and has provided financial resources for compensating mentors. Each district was required to send representatives to trainings when TEAM was first being rolled out to districts. Multiple sessions were held throughout the state. In addition, multiple trainings and meetings are scheduled for District Facilitators (DFs) each year. These serve to apprise DFs of upcoming changes to the program and to provide clarification or resolution of questions as needed. In addition, all mentors received training. New mentors are required to attend a three-day training offered by the state. Mentors who previously served under the BEST program are required to attend a one-day update training.

Besides the training sessions provided by the state, the TEAM website serves as a clearinghouse for resources for questions related to the program. The site provides a thorough overview of the program, its intention, overview of the module process. Information items are available to the public. Those directly involved with TEAM as DFs, mentors, or beginning teachers also can sign in to the website to access their dashboard. From there, they can access additional resources as well as keep track of mentor meetings and submit their PGAPs and reflection papers for review.

Despite the other design elements of TEAM, an important factor in implementation is the will of those who are tasked with implementing the program. In many ways, local will to support new teacher induction has been in place for many years. Due to prior state induction policy, it has become common expectation that there will be some form of state program for beginning teachers (Ellis, 2012a). A major help to developing positive attitudes and local will toward TEAM is the shift in focus from its predecessor and the reduced regulations and requirements. As described earlier, the former BEST program was seen as a burdensome and punishing task for beginning teachers. Teachers viewed it as an assessment tool designed to weed out under-performing teachers. BEST was notorious for lengthy program handbooks outlining the procedural and format requirements which sometimes contradicted information posted on the BEST website (LPRIC, 2007). In contrast, teachers view TEAM as more legitimate because it focuses on professional learning rather than assessment. Several of the mentors involved in the study described TEAM as “more meaningful,” “more focused,” and “more pertinent” than BEST. The perception of legitimacy is important because those who believe in the goals of a policy or program are more likely to implement the program according to its intentions than those that implement out of obligation. The structure and goal of TEAM resonated with all of the

participants in this study and all described it in positive terms. Because they believed in the mission behind it, (and because it was perceived as more “realistic” than BEST) the participants in this study demonstrated a willingness to complete the program whereas under BEST there was a great degree of resentment among many beginning teachers.

The stability of policy and people involved in the process is a key element in establishing and sustaining implementation efforts. Among the reasons these factors are important is that policies that are stable allow implementers the ability to act on and assess the outcomes of their actions. Additionally, having stable personnel allows for the establishment of institutional memory which allows for deeper understandings of the relationships among policies and actions past and present. Shifting policies and messages creates a moving target for implementers and creates uncertainty. With frequent shifts in policy priorities and messages, the results may tend to be a “wait and see” attitude among implementers rather than an effort to implement programs with fidelity. Turnover in personnel disrupts institutional memory and slows the progress of implementation as new personnel need to be brought up to speed.

One potential threat to the stability of TEAM is the potential for further budgetary cuts at the CSDE. At the time of the interviews with participants at the state level, there were additional personnel cuts targeting the TEAM office. It is unclear as of the writing of this paper the effect that budgetary problems has had on current implementation efforts, but if the budget and staff for TEAM is reduced as it was for the BEST program, it is likely that the current level of support provided by the state would not be sustainable.

Selling the program: Communication of policy intent

In a previous paper (Ellis, 2012a) I explored in greater depth the ways in which the state communicated its intentions for the policy and how well it was understood at the district level

and by the beginning teachers and mentors involved in the process. The findings of that study were that overall, there was a good degree of alignment between what the state intended for the policy and what the implementers understood. A key element in that alignment of understanding was the simplicity of the policy message and the avenues for disseminating information. That the intent of the TEAM was to promote teacher learning was well communicated and understood across levels. The use of District Facilitators and the TEAM website as the primary tools of information dissemination led to common messages being received by beginning teachers and mentors. Although there were some variations of understanding, the fundamental principles and processes behind the program were well understood and communicated.

Examining outcomes: Participant impressions of the program's success

After examining the interaction of the success factors at play in TEAM, the next step is to consider whether or not there are observable systems changes resulting from implementation of the program. In this case, systems changes would be noticeable changes to the way beginning teachers do business. Almost all of the beginning teachers and mentors participating in this study said that they had changed their practice as a result of their involvement with TEAM. Scott, a beginning technology teacher from Quaker Hill noted:

I think my thought process was changed. I can say it was definitely changed because, again, the way that I looked at myself, my teaching, things that I did, how I go about solving problems. Tech Ed is a huge area where we look at problems and try to define it. I can say that definitely changed just within my teaching abilities and how I look at myself and how I staged my lessons and how I can bring [my students], scaffold information, bring them from point A to point B.

Cassie, a beginning English teacher from Quaker Hill explained how her involvement in TEAM shaped the way she reflected on practice:

It's definitely made me more reflective. I know I keep using that word, but it is definitely making me sit down and put into words what I'm thinking about, what I'm actually doing, which I think has been helpful to me.

In addition to the beginning teachers that cited changes to their practice, several mentors commented on how their own teaching was influenced by their participation in TEAM. For example, Maria, a mentor from Foreston, noted that she believed her experience as a mentor led to her own improved teaching:

Being a TEAM mentor has actually made me a better teacher.... [I] almost informally do modules each quarter. Each quarter now, I say, "Okay, what little strategy am I going to try this quarter?" And it made me actually a little more formalized about the strategies I choose and assessing how they're working. And so, I think that the overall setup up of it is a really good mindset for teachers to be in.

Taken together, the responses of the participants indicated that almost all of the teachers involved could identify some changes to their practice as a result of participating in TEAM. In one case however, Tim from Sunnydale, did not believe his practice was altered by his experience. As is described in depth elsewhere (Ellis, 2012 a; 2012b) Tim's perception of TEAM was influenced by his overall attitude toward the program and the limited degree to which he engaged with the learning modules. Tim expressed a cavalier attitude toward the program and although he did not criticize the intentions behind it, he made it clear that completing the requirements were low on his list of priorities.

Student Outcomes

As described earlier, the ultimate goal of having new teachers participate in TEAM is to improve student learning outcomes. An important question to ask is whether or not improvements in student learning can be observed by teachers participating in the program. All of the beginning teachers that participated in this study said that they observed improvements in student learning as a result of their work on each learning module. Although their observations

were relatively general, several provided examples of what they believed constituted improvements to student learning as a result of their involvement with TEAM. Scott, a technology education teacher from Quaker Hill observed that student learning was improved as an outcome of better lesson planning. When asked if he noticed observable improvements to student learning, he responded:

I did. I saw some definitely, especially with my planning. I became a lot more thorough and even with my observations that I had with my principal here. She said I have improved some with the way I plan my lessons. The way I think out my lessons. How I want them to go from A to B to C, you know, in order.

Although his response was general, Scott believed that students were better able to follow along and make connections among ideas as a result of stronger planning.

Monica, an English teacher in Foreston, provided a more specific example. For one of her learning modules, she focused on reading differentiation. She explained that she believed students did better after implementing her PGAP on differentiation:

Last year I definitely felt like, at the end, my students had improved a lot in the areas that I chose. The first [module], both of them, focused on reading differentiation, and I felt like they definitely got better at it. For the second one I did lit circles and they got better at discussing literature, and noticing things in literature. I think before I was spoon feeding them more.

Jenn, a beginning teacher in Sunnydale also focused on differentiated instruction for one of her modules. Like Monica, she believed she could see evidence of positive student learning as a result of her work on the module:

Yeah improvements... for sure yeah, and now that I've carried it on it's kind of been instilled in my mind that I should be doing that and I do that. It's been helping the kids now because even if say I do come up with an activity or whatever and it doesn't really reach every different learning style, well then I'll see that. You know, Bobby or whoever doesn't really understand how to do this, and then I can take them and give them another option to do like the same ideas or the same... reach the same goal that was set, but in a different way, individually. So I'm more willing and able to do that one-on-one if a whole class thing doesn't work.

Despite the claims of the beginning teachers that they saw positive improvements to student learning, several of the mentors cautioned judging the type of learning improvements were observable. While many measures of student learning outcomes rely on standardized test scores, it was not possible to measure outcomes in all areas. Rosette, a mentor in Sunnydale, was more reserved about quantifiable learning improvements:

That's the thing; I don't know. I wouldn't be able to see her test scores, or stuff like that. Just based on what she tells me is what I am aware of. I observed one class with her last year, so I was able to see if they were understanding what they were getting and that type of thing. Beyond that, I don't know.

Part of the dilemma of assessing the influence of the TEAM process on student outcomes is due in part to the type of action plan that a beginning teacher and mentor develop. As Maria, one of the mentors from Foreston noted:

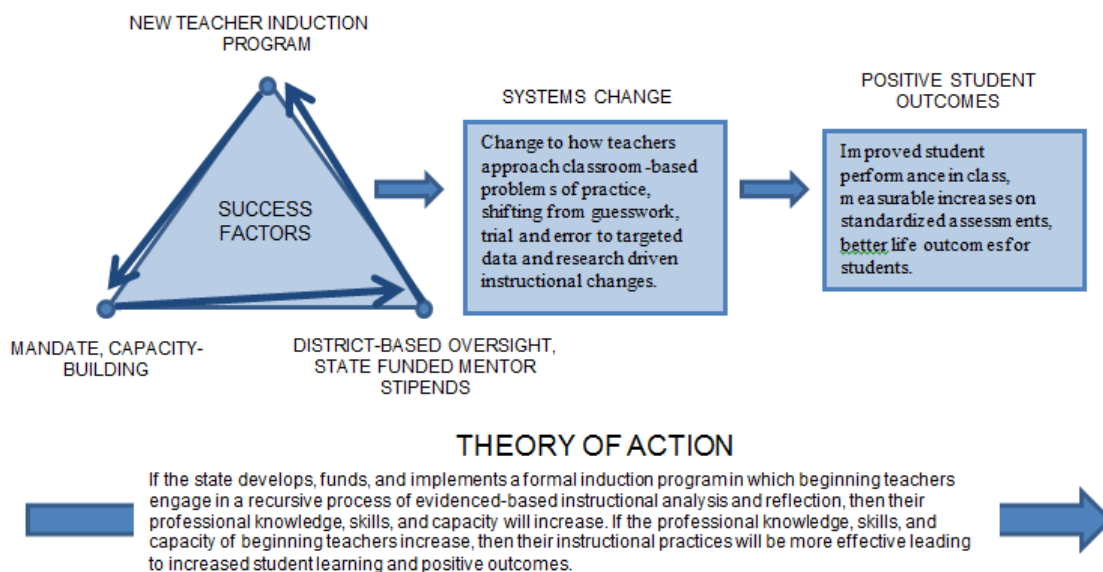
It's more broad-based student outcomes, you know, did you have higher engagement, things like that. You know, so it's -- and I guess it also depends on what the teacher's focusing on because if they write in their goal, you know, to raise scores, well, then, yeah, it's explicitly based on student outcomes. But if their goal is, you know, to increase rapport, or to do better classroom management, then there isn't as a direct, you know, kind of data driven connection between the two.

Maria's cautionary note is important in that efforts to assess the value of TEAM on student outcomes must account for the type of goal and the domain of student learning that it seeks to influence. PGAPs that target behavioral student outcomes, such as motivation and engagement, may be harder to assess than those targeting specific learning goals such as improved reading comprehension. The targets of the PGAPs themselves likely play a significant role on the type and degree of influence on student outcomes.

Based on the foregoing discussion, the TEAM program can be represented graphically using the HLP model to help describe the process. Figure 2 demonstrates how TEAM may be analyzed using the HLP framework. The left side of the model demonstrates the interactions

among the three “success factors” within the HLP framework: leverage points, design features, and implementation contingencies. The interactions among these factors leads to an intended systems change in how teachers approach identifying and addressing classroom-based problems of practice. The goal of this change is to improve overall student performance in class which, it is assumed, would likely lead to positive student outcomes that would pave the way for greater equity of opportunity for all students. Additionally, although not explicitly stated in state documents related to TEAM, it may be inferred from prior research that additional positive outcomes of participation in TEAM may be increases in teacher retention (Ingersoll, 1997, 2001; Smith & Ingersoll, 2004).

Figure 2. HLP Framework Applied to TEAM



CONCLUSION

So, does TEAM fit the criteria of a high leverage policy as defined within the HLP framework? Based on the available evidence, we cannot draw conclusions without additional research. In order to be considered high leverage, the HLP framework posits that three conditions must be satisfied: that it leads to increased academic aspirations, achievement, or attainment for all students; promotes greater equity in learning, performance, or life outcomes for students; and generates positive ripple effects throughout an educational system (Cobb, et al., 2010, p. 3). As a program, TEAM is still in its early stages and the extent of the effects that teacher participation plays on student outcomes remain to be studied. Available assessments of student outcomes rely on the perceptions of teachers who must track and chart evidence of student learning that results from their work on each TEAM module. Each of the teachers involved in this study, as well as their mentors, cited positive student outcomes that resulted from teacher involvement in the module process. Despite this anecdotal evidence, self-assessment data is not be enough.

Before fully evaluating where TEAM falls as an example of a high leverage policy, further research is warranted. Although all of the teachers cited improved student outcomes resulting from their work on the TEAM modules, the structure of the reflection papers requires teachers to explain the student learning that occurred as a result of implementing their professional growth action plans (PGAPs). The task *assumes* that student learning occurred and it forces the beginning teacher to seek evidence of learning even if the evidence is not compelling. Additionally, it is not likely that a beginning teacher would be willing at the end of his or her module work to admit limited or no observable student learning occurred. Additional research including direct classroom observations, observations of mentor meetings, and analysis of teacher PGAPs is warranted to provide greater depth as well as independent review of teacher

claims of student outcomes. With that data in-hand, a better sense of how TEAM measures up against the HLP framework may be determined.

Limitations of the study

Several factors create limitations to this study. One major limiting factor relates to the study's design. By relying exclusively on self-report interview data without direct observation of teacher behavior, the results may suffer from the biases inherent in self-reporting, namely a potential to under-report certain behaviors or to respond to questions in "socially desirable" ways (Donaldson & Grant-Villone, 2002, p. 247). In each case, the beginning teachers stated that they observed improved student learning outcomes but few were able to articulate specific evidence in support of their claims. Without direct observations or examination of student-level data, these reports cannot be verified or refuted. Additional studies involving direct classroom observations and analysis of student achievement data are warranted to draw conclusions about TEAM as HLP.

Another limiting factor relates to the selection of districts to participate. By selecting districts in the middle of the DRGs, it was intended to avoid the discrepancies of implementation and inequities caused by comparing districts from different socio-economic statuses. By doing this however, the study ignores some factors that may influence implementation. As the TEAM program is highly decentralized, it is reasonable to assume, based on other research (Johnson, Kardos, Kauffman, Liu, & Donaldson, 2004; Kardos & Johnson, 2010) that implementation will be affected by socio-economic factors. A major motivation behind TEAM is to improve student performance and to close the achievement gap; however, it remains to be seen what, if any, effects participation in TEAM has on attempts to "level the playing field." Additional research

could examine questions of equity and the relationship between socio-economic factors and implementation of TEAM.

A final factor that limits this study is the absence of data examining the relationship between student performance in the short and long-term and teacher participation in TEAM. This is a fundamental piece of the puzzle necessary to evaluate fully TEAM's potential as HLP. Both quantitative and qualitative studies are necessary to assess whether or not teacher participation in TEAM influences student outcomes, and if so the TEAM-based factors that promote or inhibit student growth.

Contributions to the literature

Despite the limitations of this study, it makes several new contributions to the field of educational policy analysis. First, as TEAM is a new program, this study is one of the first to examine it. Connecticut's previous model, the BEST program, was widely studied and was influential to other states and cities seeking to develop models of their own (Peccheone, et. al., 2005; Youngs, 2002, 2007). By analyzing the theory of action, design, and structure of the TEAM program, it is hoped that other districts, cities, and state seeking to develop or refine induction programs will find the example useful in planning their own programs.

Additionally, this is one of the first studies to employ the High Leverage Policy framework to analyze an existing policy. This study provides an example of how the HLP framework may be operationalized using an actual policy. Although the HLP framework is designed in part as a policy planning tool, the use of the framework to analyze existing policies can also prove not only the utility of the framework but can shed light on areas of strength and limitation of existing policies.

REFERENCES:

- Ali, S. (2006). Why does policy fail? Understanding the problems of policy implementation in Pakistan—a neuro-cognitive perspective. *International Studies in Educational Administration*, 34 (1), 2-20.
- Association for Supervision and Curriculum Development (2008). <http://www.ascd.org>.
- Atkinson, P. & Delamont, S. (1985). Socialisation into teaching: the research which lost its way. *British Journal of Sociology of Education*, 6 (3), 307-322.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28 (2), 117-148.
- Baumgartner, F. R. & Jones, B. D. (1993). *Agendas and instability in American politics*. Chicago: University of Chicago Press.
- Belenky, M. F., Clinchy, B. M., Goldberger, N. R., & Tarule, J. M. (1997). *Women's ways of knowing*. New York: Basic Books.
- Bereiter, C. (1985). Towards a solution of the learning paradox. *Review of Educational Research*, 55 (2), 201-226.
- Berman, P. (1978). Micro-implementation of social policy. The RAND Paper Series, Santa Monica California.
- Blanton, L. P., Sindelar, P. T., & Correa, V. I. (2006). Models and measures of beginning teacher quality. *Journal of Special Education*, 40 (2), 115-127.
- Britton, E., Paine, L., Pimm, D., & Raizen, S. (2003). *Comprehensive teacher induction: Systems for early career learning*. Dordrecht, Netherlands and San Francisco: Kluwer Academic Publishers and WestEd.
- Brown, J. S., Collins, A., & Duguid, P. (1989a). Situated cognition and the culture of learning. *Educational Researcher*, 18 (1), 32-42.
- Brown, J. S., Collins, A., & Duguid, P. (1989b). Debating the situation: A rejoinder to Palincsar and Wineburg. *Educational Researcher*, 18 (4), 10.
- Capitol Region Educational Center (2006). BEST mentor/Cooperating Teacher training—attended by the author.
- Capitol Region Educational Center (2009). TEAM training for school and district administrators—attended by the author, Hartford, CT, October-November, 2009.

- Carey, R.D. (1963). The “care and feeding” of new teachers. *Peabody Journal of Education*. 40 (6), 353-357.
- Chin, E., & Asera, R. (2005). *Teacher Certification Policy: Multiple Treatment Interactions on the Body Politic*. Edited by Nina Bascia, Alister Cumming, Amanda Datnow, Kenneth Leithwood and David Livingstone. Springer International Handbooks of Education, pp. 473-490. Volume 13, International Handbook of Educational Policy. Springer, Netherlands.
- City, E. A., Elmore, R. F., Fiarman, S. E., & Teitel, L. (2009). *Instructional rounds in education*. Cambridge, MA: Harvard Education Press.
- Cobb, C., Donaldson, M., Lemons, R., & Mayer, A. (2010). High leverage policy framework. Portland, ME: New England Secondary School Consortium.
- Coburn, C. E. (Summer, 2001). Collective sense-making about reading: How teachers mediate reading policy in their professional communities. *Educational Evaluation and Policy Analysis*, 23 (2), 145-170.
- Coburn, C. E. (Autumn, 2006). Framing the problem of reading instruction: Using frame analysis to uncover the micro-processes of policy implementation. *American Educational Research Journal*, 43 (3), 343-379.
- Cohen, D. K., Moffitt, S. L., & Goldin, S. (2007). Policy and practice: The dilemma. *American Journal of Education*, 113 (4), 515-548.
- Connecticut State Department of Education (2010). Connecticut’s Common Core of Teaching.
- Connecticut State Department of Education (2012). *Connecticut Teacher Education and Mentoring Program*, retrieved on November 20, 2012 from <https://www.ctteam.org>.
- Cross, C. T. (2004). *Political education*. New York: Teachers College Press.
- Darling-Hamond, L., Berry, B. T., Haselkorn, D., & Fideler, E. (1999). Teacher recruitment, selection, and induction: policy influences on the supply and quality of teachers. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession*, (pp. 183-232) San Francisco: Jossey Bass.
- Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives*, 8 (1).
- Darling-Hammond, L.. and Sykes, G.. (2003, September 17). Wanted: A national teacher supply policy for education: The right way to meet the "Highly Qualified Teacher" challenge. *Education Policy Analysis Archives*, 11 (33). Retrieved [November 19, 2004] from <http://epaa.asu.edu/epaa/v11n33/>.

- Darling-Hammond, L., & Bransford, J. (Eds.) (2005). *Preparing Teachers for a Changing World: What Teachers Should Learn and Be Able to Do*. San Francisco, CA: Jossey-Bass.
- Desimone, L., Porter, A.C., Garet, M., Suk Yoon, K., & Birman, B. (2002). Effects of professional development on teachers' instruction: Results from a three-year study. *Educational Evaluation and Policy Analysis*, 24 (2), 81-112.
- Dewey, J. (1938). *Experience and learning*. New York: Kappa Delta Pi, MacMillan.
- Driscoll, M.P. (2000). *Psychology of learning for instruction*. 2nd ed. Boston: Allyn and Bacon.
- Eaker, R., DuFour, R., & DuFour, R. (2002). *Getting started: restructuring schools to become professional learning communities*. Bloomington, IN: National Education Service.
- Eccles, J. S., & Wigfield, A. (2002). Motivation, beliefs, values, and goals. *Annual Review of Psychology*, 53, 109-132.
- Edelman, M. (1985). *The symbolic uses of politics*. University of Illinois Press.
- Edgar, D.E., & Warren, R.L. (1969). Power and autonomy in teacher socialization. *Sociology of Education*, 42 (4), 386-399.
- Ehrich, L. C., Hansford, B., & Tennent, L. (2004). Formal mentoring programs in education and other professions: A review of the literature. *Educational Administration Quarterly*, 40 (4), 518-540.
- Ellis, C. D. & Donaldson, M. L. (2010). Doers and delegators: Principal involvement in new teacher induction. A paper presented at the American Educational Research Association annual conference, Denver, CO: April 30 – May 4, 2010.
- Ellis, C. D. (2012a). Making sense, making do: Local district implementation of a new state induction policy. An unpublished dissertation article, University of Connecticut, Storrs.
- Ellis, C. D. (2012b). Learning is a TEAM effort: The role of Connecticut's new state induction policy in the professional learning of beginning teachers. An unpublished dissertation article, University of Connecticut, Storrs.
- Elmore, R. (1983). *Complexity and control: What legislators and administrators can do about implementing public policy*. In L. Shulman and G. Sykes. (Eds.) *Handbook of teaching Policy* (pp. 342-369). New York: Longman.

- Elmore, R., & Burney, D. (1998). *School variation and systemic instructional improvement in Community District #2, New York City*. Philadelphia: Consortium for Policy Research in Education, University of Pennsylvania.
- Elmore, R., & Burney, D. (1999). Investing in teacher learning: Staff development and instructional improvement. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession* (pp. 263-291). San Francisco: Jossey Bass.
- Feiman-Nemser, S. (2001a). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record*, 103, 1013-1055.
- Feiman-Nemser, S. (2001b). Helping novices learn to teach: Lessons from an Exemplary Support Teacher. *Journal of Teacher Education*, 52 (1), 17-30.
- Feiman-Nemser, S. (2003). What new teachers need to learn. *Educational Leadership*, 60 (8), 25-29.
- Feldman, D. C. (1976). A practical program for employee socialization. *Organizational Dynamics*, Autumn, 64-80.
- Fenstermacher, G.D., and Richardson, V. (2005). On making determinations of quality in teaching. *Teachers College Record*. 107 (1), 186-213.
- Fenwick, T. J. (2000). Expanding conceptions of experiential learning: A review of the five contemporary perspectives on cognition. *Adult Education Quarterly*, 50 (4), 243-272.
- Fenwick, T.J. (Spring, 2004). Teacher learning and professional growth plans: Implementation of a provincial policy. *Journal of Curriculum and Supervision*, 19 (3), 259-282.
- Fletcher, S., Strong, M., & Villar, A. (2008). An investigation of the effects of variations in mentor-based induction on the performance of students in California. *Teachers College Record*, 110 (10), 2271-2289.
- Flores, M.A. (2001). Person and context in becoming a new teacher. *Journal of Education for Teaching*, 27 (2), 135-148.
- Garet, M., Porter, A., Desimone, L., Birman, B., & Yoon, K. (2001). What makes professional development effective? Analysis of a national sample of teachers. *American Education Research Journal*, 38 (3), 915-945.
- Gilbert, L. (2005). What helps beginning teachers? *Educational Leadership*, 62 (8), 36-39.
- Goe, L., & Stickler, L. (2008). *Teacher quality and student achievement: Making the most of recent research*. Washington, DC: National Comprehensive Center for Teacher Quality.

- Grossman, P., & Thompson C. (2004). District policy and beginning teachers: A lens on teacher learning. *Educational Evaluation and Policy Analysis*, 26 (4), 281-301.
- Guin, K. (2004). Chronic teacher turnover in urban elementary schools. *Education Policy Analysis Archives*, 12 (42). Retrieved [November 19, 2004] from <http://epaa.asu.edu/epaa/v12n42/>.
- Haas, E., Wilson, G., Cobb, C, & Rallis, S. (2005). One hundred percent proficiency: A mission impossible. *Equity and Excellence in Education*, 38, 180-189.
- Ingersoll, R. M. (1997). Teacher turnover and teacher quality: the recurring myth of teacher shortages. *Teachers College Record*, 99 (1), 41-44.
- Ingersoll, R. M. (2001). Teacher turnover and teacher shortages: an organizational analysis. *American Educational Research Journal*, 38 (3), 499-534.
- Ingersoll, R. (2006). *Who controls teachers' work? Power and accountability in American schools*. Boston: Harvard University Press.
- Johnson, S. M., & Kardos, S. M. (2002). Keeping new teachers in mind. *Educational Leadership*, 59 (6), 12-16.
- Johnson, S. M., Kardos, S. M., Kauffman, D., Liu, E. & Donaldson, M. L. (2004, October 29). The support gap: New teachers' early experiences in high-income and low-income schools. *Education Policy Analysis Archives*, 12 (61). Retrieved [12/9/04]from <http://epaa.asu.edu/epaa/v12n61/>.
- Johnson, S. M. & Birkeland, S. E. (2003a). Pursuing a sense of success: new teachers explain their career decisions. *American Educational Research Journal*, 40 (3), 581-617.
- Johnson, S. M. & Brikeland, S. E. (2003b). The schools that teachers choose. *Educational Leadership*, 60 (8), 20-24.
- Johnson, S. M. (2004). *Finders and keepers: Helping new teachers survive and thrive in our schools*. San Francisco, CA: Jossey-Bass.
- Johnston, B., Wetherill, K., & Greenbaum, H. (2002). Teacher socialization: opportunities for University-school partnerships to improve professional cultures. *High School Journal*, 23-39.
- Julius, A.K. (1976). Britain's new induction plan for first year teachers. *The Elementary School Journal*, 76 (6), 350-357.
- Kauffman, D., Johnson, S.M., Kardos, S.M., Liu, E., & Peske, H.G. (2002). Lost at sea: new teachers' experiences with curriculum and assessment. *Teachers College Record*, 104 (2), 273-300.

- Kelly, S. (2012). Understanding teacher effects: market versus process models of educational improvement. In *Assessing Teacher Quality*, Sean Kelly (ed.), New York: Teachers College Press.
- Kennedy, M. (2005). *Inside Teaching. How Classroom Life Undermines Reform*. Cambridge: Harvard University Press.
- Kerr, D. (1976). *Educational Policy: Analysis, Structure, and Justification*. New York: John Wiley.
- Kolb, D. (1984). *Experiential learning: Experience as the source of learning and development*. New Jersey: Prentice Hall.
- Konstantopoulos, S. (2012). Teacher effects past present, and future. In, *Assessing Teacher Quality*, Sean Kelly (ed.), New York: Teachers College Press.
- Kliebard, H. (2002). *The Struggle for the American Curriculum*. New York: Routledge.
- Lave, J., & Wenger, E. (1991). *Situated Learning - legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Legislative Program Review and Investigations Committee (December 2007). *Beginning Educator and Support Program*. Connecticut General Assembly: Hartford, CT.
- Lipsky, M. (1980). *Street level bureaucracy*. New York: Basic Books.
- Long, J. (1997). The dark side of mentoring. *Australian Educational Researcher*, 24 (2), 115-133.
- Lortie, D.C. (1969). The balance of control and autonomy in elementary school teaching. In *The semi-professions and their organization*, 1-53.
- Lortie, D. C. (1975). *Schoolteacher*. Chicago: University of Chicago Press.
- Luft, J., Roehrig, G., & Patterson, N. (2003). Contrasting landscapes: A comparison of the impact of different induction programs on beginning secondary science teachers' practices, beliefs, and experiences. *Journal of Research in Science Teaching*, 40 (1), 77-97.
- Majone, G. & Wildavsky, A. (1978). Implementation as evolution, in *The Policy Studies Review Annual: 1978*, (Howard Freeman, ed.). Beverly Hills: Sage.
- McCann, T. M. , Johannesen, L. R. & Ricca, B. (2005). Responding to new teacher's concerns. *Educational Leadership*, 62 (8), 30-34.

- McDonnell, L. & Elmore, R. (1987). Getting the job done: Alternative policy instruments. *Educational Evaluation and Policy Analysis*, 9 (2), 133-152.
- McDonnell, L. (2004). Persuasion as policy instrument. Chapter 2, *Politics, Persuasion, and Educational Testing*. Cambridge: Harvard University Press.
- McGinnis, J. R., Parker, C., & Graebor, A. O. (2004). A cultural perspective of the induction of five reform-minded beginning mathematics and science teachers. *Journal of Research in Science Teaching*, 41(7), 720-747.
- Moss, P. A., Sutherland, L. M., Haniford, L., Miller, R., Johnson, D., Geist, P. K., et al. (2004). Interrogating the generalizability of portfolio assessments of beginning teachers: A qualitative study. *Education Policy Analysis Archives*, 12 (32), 1-70.
- Murphy, P., DeArmond, M., Guin, K. (2003). A national crisis or localized problems? getting perspective on the scope and scale of the teacher shortage. *Education Policy Analysis Archives*, 11 (23). Retrieved [November 19, 2004] from <http://epaa.asu.edu/epaa/v11n23/>.
- National Center for Education Statistics (2008). Table 1.15. Requirements for participation in state-funded induction programs and mentoring programs for beginning teachers. http://nces.ed.gov/programs/statereform/saa_tab15.asp [accessed on July 18, 2008].
- O'Sullivan, D. (1980). Teacher socialisation and teacher style in an Irish cultural context. *European Journal of Education*, 15 (4), 387-397.
- Packer, M., & Goicoechea, J. (2000). Sociocultural and constructivist theories of learning: Ontology, not just epistemology. *Educational Psychologist*, 35 (4), 227-241.
- Palincsar, A. S. (1989). Less charted waters. *Educational Researcher*, 18 (4), 5-7.
- Pecheone, R. L., Pigg, M. J., Chung, R. R., & Souviney, R. J. (March/April 2005). Performance assessment and electronic portfolios: their effect on teacher learning and education. *Clearing House*, 78 (4), 164-176.
- Phillips, D. C. (1995). The good, the bad, and the ugly: The many faces of constructivism. *Educational Researcher*, 24 (7), 5-12.
- Reed, D, Reuben, K. S. & Barbour, E. (2006). *Retention of new teachers in California*. San Francisco, CA: Public Policy Institute of California.
- Rice, J. K. (2003). *Teacher quality: Understanding the effectiveness of teacher attributes*. Washington, DC: Economic Policy Institute.
- Roth, W.-M., & Lee, Y.-J. (2007). "Vygotsky's neglected legacy": Cultural-historical activity theory. *Review of Educational Research*, 77 (2), 186-232.

- Sabar, N. (2004). From heaven to reality through crisis: novice teachers as migrants. *Teaching and Teacher Education*, 20, 145-161.
- Sanders, W. L., & Horn, S. P. (1998). Research findings from the Tennessee Value-Added Assessment System (TVAAS) database: Implications for educational evaluation research. *Journal of Personnel Evaluation in Education*, 12 (3), 247-256.
- Schleety, P. C. and Whitford, B. L. (1989). Systemic perspectives on beginning teacher programs. *Elementary School Journal*, 89 (4), 440-449.
- Schon, D. (1983). *The reflective practitioner*. New York: Basic Books.
- Sheckley, B. G. & Keeton, M. T. (1997a) Service learning: A theoretical model, Service Learning, Ninety-sixth Yearbook of the National Society for the Study of Education, 32- 55.
- Sheckley, B. G. & Keeton, M. T. (1997b). Improving employees development: Perspectives from research and practice. Chicago: Council for Adult and Experiential Learning.
- Sheckley, B. G. & Keeton, M. T. (1997c). A review of the research on learning: Implications for the instruction of adult learners. A paper presented to the AAHE planning meeting, Denver, Colorado, May 7-8, 1997.
- Sfard, A. (1998). On two metaphors for learning and on the danger of choosing just one. *Educational Researcher*, 27 (2), 4-13.
- Shulman, L. S. & Shulman, J. H. (2004). How and what teachers learn: A shifting perspective. *Journal of Curriculum Studies*, 36 (2), 257-271.
- Smith, T. M. & Ingersoll, R. M. (2004). What are the effects of induction and mentoring on beginning teacher turnover? *American Educational Research Journal*, 41(3), 681-714.
- Speier, C. & Frese, M. (1997). Generalized self-efficacy as a mediator and moderator between control and complexity at work and personal initiative: A longitudinal field study in East Germany. *Human Performance*, 10 (2), 171-192.
- Spillane, J. (2004). *Standards Deviation. How Schools Misunderstand Education Policy*. Cambridge: Harvard University Press.
- Stroble, E. & Cooper, J.M. (1988) Mentor teachers: coaches or referees? *Theory Into Practice*, 27 (3), 231-236.
- Strong, M. (2005). Teacher induction, mentoring, and retention: A summary of the research. *The New Educator*, 1, 181-198.

- Su, J. Z. X. (1992). Sources of influence in preservice teacher socialization. *Journal of Education for Teaching*, 18 (3), 239-258.
- Tate, M. W. (1943). The induction of secondary-school teachers. *The School Review*, 51 (3), 150-157.
- Tyack, D., & Cuban, L. (1995). *Tinkering toward utopia: A century of public school reform*. Cambridge, MA: Harvard University Press.
- United States Department of Education. (1995). <http://nces.ed.gov/pubs95/web/95770.asp>.
- Villar, A., & Strong, M. (Summer 2007). Is Mentoring Worth the Money? A Benefit-Cost Analysis and Five-year Rate of Return of a Comprehensive Mentoring Program for Beginning Teachers. *ERS Spectrum: Journal of Research and Information*. 25(3): 1-17, Educational Research Service.
- Vygotsky, L. (1930/1978). *Mind and society*. Cambridge, MA: Harvard University Press.
- Wang, J, Odell, S. J., & Schwille, S. A. (2008). Effects of teacher induction on beginning teachers' teaching: A critical review of the literature. *Journal of Teacher Education*, 59 (2), 132-152.
- Weiss, C. (1995). The four I's of school reform: How interest, ideology, information, and institutions affect teachers and principals. *Harvard Educational Review*, 65 (4), 571-592.
- Wilson, S. M., Darling-Hammond, L., & Berry, B. (February 2001). A case of successful teaching policy: Connecticut's long-term efforts to improve teaching and learning. Center for the Study of Teaching and Policy, University of Washington, Document R-01-2.
- Wilson, S. M., & Floden, R. E. (2003). Creating effective teachers: concise answers for hard questions. Washington. D.C.: AACTE Publications.
- Wilson, S. M., & Berne, J. (1999). Teacher learning and the acquisition of professional knowledge: An examination of research on contemporary professional development. *Review of Research in Education*, 24, 173-209.
- Windschitl, M. (2002). Framing constructivism in practice as negotiation of dilemmas: An analysis of the conceptual, pedagogical, cultural, and political challenges facing teachers. *Review of Educational Research*, 72(2), 131-175.
- Wineburg, S. S. (1989). Remembrance of theories past. *Educational Researcher*, 18 (4), 7-10.
- Wong, H. K. (2004). Induction programs that keep new teachers teaching and improving. *NASSP Bulletin*, 88 (41), 41-58.

- Yin, R. K. (2008). Case study research: Design and methods (Vol. 5). SAGE Publications, Incorporated.
- Youngs, P. (November, 2002). State and district policy related to mentoring and new teacher induction in Connecticut. A paper prepared for the National Commission on Teaching and America's Future.
- Youngs, P. (2007). District induction policy and new teachers' experiences: An examination of local policy implementation in Connecticut. *Teachers College Record*. 109 (4), 797-837.
- Yusko, B., & Feiman-Nemser, S. (2006). Embracing contraries: Assistance and assessment in new teacher induction. *Teachers College Record*, 110 (5), 923-953.